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Report of the Auditor General of Canada to the House of Commons



Fiscal Year Ended
31 March 1983



Report of the Auditor General of Canada to the House of Commons

Fiscal Year Ended
31 March 1983



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AUDITOR GENERAL OF CANADA

VÉRIFICATEUR GÉNÉRAL DU CANADA

To The Honourable the Speaker of the House of Commons:

I have the honour to transmit herewith my Report to the House of Commons for the fiscal year ended 31 March 1983, to be laid before the House in accordance with the provisions of section 7(3) of the Auditor General Act, S.C. 1976-77, c. 34.

A handwritten signature in dark ink, appearing to read "Kenneth M. Dye".

Kenneth M. Dye, F.C.A.
Auditor General of Canada

OTTAWA, 5 December 1983

TABLE OF CONTENTS

Chapter		Page
	Introduction	1
1.	MATTERS OF SPECIAL IMPORTANCE AND INTEREST	5
GOVERNMENT-WIDE AUDITS AND OTHER STUDIES		
2.	CONSTRAINTS TO PRODUCTIVE MANAGEMENT IN THE PUBLIC SERVICE	53
3.	PROGRAM EVALUATION	93
4.	THE MANAGEMENT OF COMPUTING IN THE PUBLIC SERVICE	135
5.	MANAGEMENT OF THE FORECASTING PROCESS – DEPARTMENT OF FINANCE	175
COMPREHENSIVE AUDITS		
6.	COMMISSIONER OF OFFICIAL LANGUAGES	193
7.	DEPARTMENT OF COMMUNICATIONS	215
8.	EMPLOYMENT AND IMMIGRATION CANADA	241
9.	ENERGY, MINES AND RESOURCES – ENERGY PROGRAM	287
10.	ENVIRONMENT – PARKS CANADA	335
11.	DEPARTMENT OF LABOUR	365
12.	SOLICITOR GENERAL'S SECRETARIAT	383
13.	DEPARTMENT OF TRANSPORT – MARINE TRANSPORTATION PROGRAM	401

A detailed table of contents precedes each chapter.

Chapter		Page
14.	NATIONAL LIBRARY OF CANADA	433
15.	PUBLIC ARCHIVES OF CANADA	461
16.	STATISTICS CANADA	487
	ADDITIONAL AUDIT OBSERVATIONS	
17.	ADDITIONAL AUDIT OBSERVATIONS	521

18.	ORGANIZATION AND PROGRAMS OF THE OFFICE OF THE AUDITOR GENERAL	553
	APPENDICES	
Appendix		
A.	AUDITOR GENERAL ACT	573
B.	FINANCIAL ADMINISTRATION ACT -EXTRACTS FROM PART VIII	581
C.	REPORTS OF THE STANDING COMMITTEE ON PUBLIC ACCOUNTS TO THE HOUSE OF COMMONS	583
D.	OPINION AND OBSERVATIONS BY THE AUDITOR GENERAL ON THE FINANCIAL STATEMENTS OF THE GOVERNMENT OF CANADA	595

A detailed table of contents precedes each chapter.

**REPORT OF THE AUDITOR GENERAL
TO THE HOUSE OF COMMONS
FOR THE FISCAL YEAR ENDED 31 MARCH 1983**

INTRODUCTION

The principal functions and responsibilities of the Auditor General of Canada are set out in the Auditor General Act, S.C. 1976-77, c. 34, which came into force 1 August 1977. My responsibilities in respect to those Crown corporations for which I have been appointed auditor are set out in sections 76 to 78 of the Financial Administration Act, R.S.C. 1970, c. F-10. The Auditor General Act is included as Appendix A to this Report and the relevant sections of the Financial Administration Act as Appendix B.

In compliance with section 7 of the Auditor General Act, my Report for the fiscal year ended 31 March 1983 is presented herewith.

My examination included general reviews of the accounting procedures and such tests of accounting records and other supporting evidence as were considered necessary in the circumstances. My staff was provided with all the information and explanations required. I should like to express my appreciation and that of my associates in the Audit Office for the co-operation extended to us by officials of departments, agencies and Crown corporations.

The financial statements of the Government of Canada for the fiscal year ended 31 March 1983, which have been prepared by the Receiver General for Canada in accordance with the provisions of section 55 of the Financial Administration Act and appear in Volume I of the Public Accounts of Canada, have been examined by me as required by section 6 of the Auditor General Act. These statements and my opinion and observations thereon are reproduced as Appendix D to this Report.

MATTERS OF SPECIAL IMPORTANCE AND INTEREST

JAMES J. MACDONELL

My first sad privilege in this year's annual Report is to pay tribute to my predecessor, James J. Macdonell, who died suddenly on 22 March 1983. As Canada's seventh Auditor General, Jim Macdonell has left an indelible mark on federal affairs.

On occasion, auditors are criticized for being experts on things that lie only in the past; their comments focus on transactions that have already taken place. Jim Macdonell's great gift was his ability to look into the meaning of events and chart a way for the future. This is not the place to re-tell all the details of those remarkable years during which he restructured this Office and, in a series of annual Reports, prompted the total restructuring of the accountability mechanisms of the federal bureaucracy.

It is sufficient to say that, whether they know or remember James J. Macdonell's name, all Canadians live within his legacy. At first, almost alone in his time, he understood the urgent need for this country's finances to be brought under closer scrutiny by Parliament. His enormous energy and infinite persuasiveness led to the proclamation of the Auditor General Act in 1977 and the appointment of the first Comptroller General of Canada in 1978. A direct consequence of his work is that Canada is now regarded internationally as a leader in the difficult and complex task of achieving greater accountability of government.

On his retirement as Auditor General in 1980, Jim Macdonell was elected Chairman of the newly established Canadian Comprehensive Auditing Foundation. There, legislative auditors from around the world came for his knowledge, wisdom and counsel.

In the midst of this new work, he died. His was a good life. He was a great Canadian.

MATTERS OF SPECIAL IMPORTANCE AND INTEREST

Table of Contents

	Paragraph	Page
JAMES J. MACDONELL		5
The Financial Statements of the Government of Canada	1.1	9
Accountability of Crown-owned Corporations	1.31	14
Constraints to Productive Management in the Public Service	1.72	23
Program Evaluation	1.111	28
IMPAC Progress Review	1.121	29
A Lack of a Sense of Urgency	1.123	30
Information Needed to Fulfil Audit Responsibilities	1.136	32
Information Resources Management	1.140	32
The Role of the Senior Financial Officers	1.151	34
The Office of the Auditor General and the House of Commons	1.161	36
Boards	1.165	36
Main Messages in the 1983 Report	1.170	37
Exhibits		
1.1 Distribution of Expenditures 1982-83 Fiscal Year		10
1.2 Summary Information – Crown Corporations		21

MATTERS OF SPECIAL IMPORTANCE AND INTEREST

The Financial Statements of the Government of Canada

1.1 Canadians know that our country has been moving through tough economic times. The forecasts remain mixed. For many of our people, these are still harsh days.

1.2 One important result of our economic troubles is an intense scrutiny of government spending. The climate of these times is one in which taxpayers are demanding that their tax dollars be spent wisely and well by all levels of government.

1.3 Recently, I signed the Opinion of the Auditor General on the Financial Statements of the Government of Canada. Those statements are a part of the public accounts, which reflect the financial transactions of the federal government for the fiscal year ending 31 March 1983.

1.4 On the expenditure side, the accounts reveal where Canadians' tax dollars go. They also show the relationship between the operating costs of the federal government and the rising federal budgets and deficits. Many people assume that increased government spending and the increased deficit are due to an ever enlarging bureaucracy. That is not so.

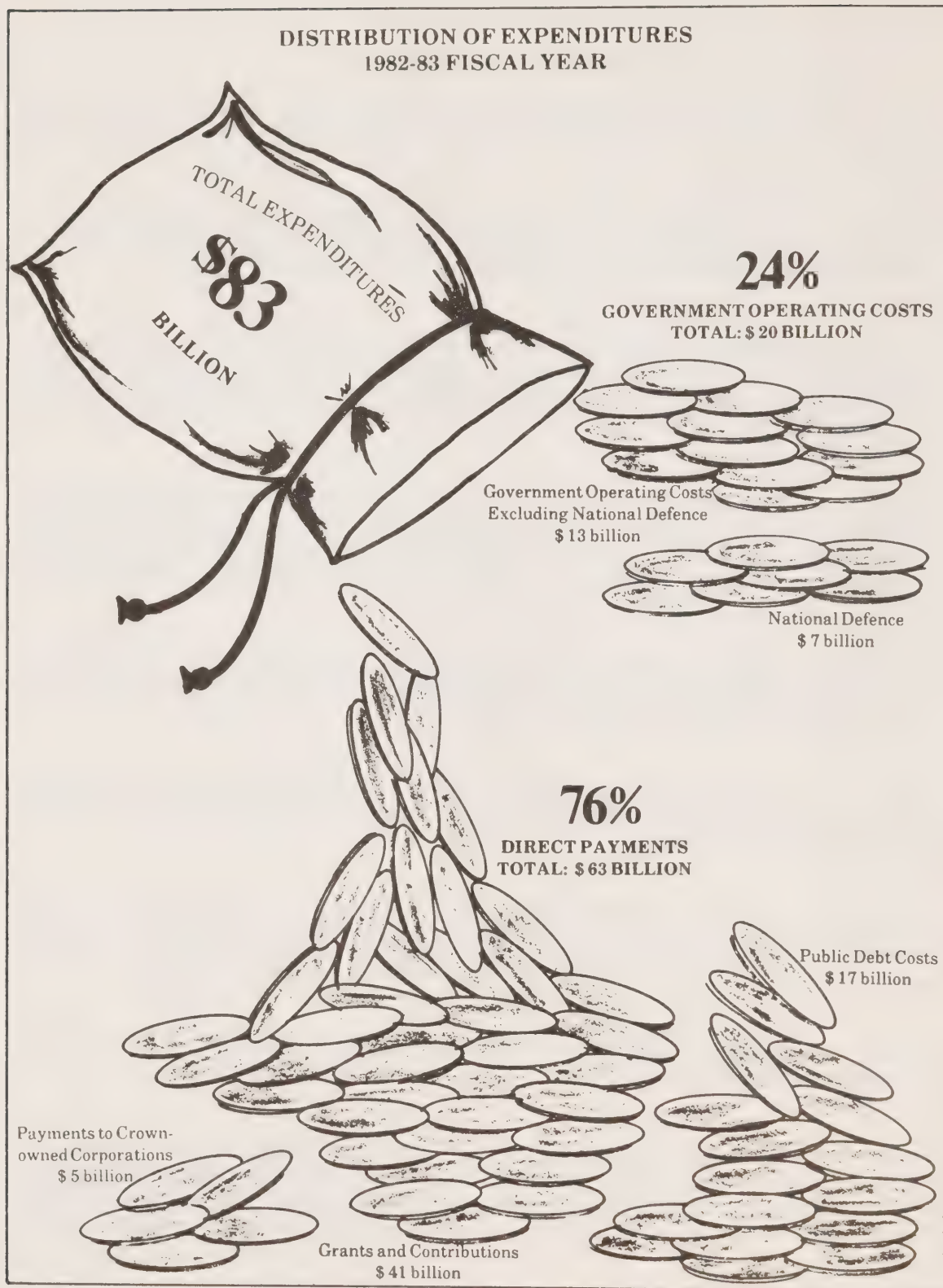
1.5 In fact, operating and capital expenditures within departments and agencies, including National Defence, account for almost one-quarter of the total federal budget. The figure for the year ended 31 March 1983 is \$20 billion.

1.6 Where, then, is the rest of the money going? The answer is that a massive \$63 billion goes in grants and contributions, to servicing the public debt and in payments to specific Crown-owned corporations.

1.7 Grants and contributions include payments to the provinces for health services, Canada Assistance Plan and post-secondary education, and to individuals as old-age security, family allowances, and unemployment insurance. The total is \$41 billion.

1.8 Public debt costs were \$17 billion for 1982-1983. Payments to Crown-owned corporations were \$5 billion.

1.9 Two years ago, I expressed concern about the size of the national debt and the ever-increasing annual deficits. That both the national debt and the annual deficits have grown substantially larger over the ensuing years continues to concern me. The decisions which result in annual deficits are policy decisions. These are beyond the purview of my



Office. I am also, of course, aware that economists have widely divergent views in regard to the merits of deficit financing.

1.10 What should be beyond dispute, however, is that the Financial Statements of the Government of Canada should, as informatively as possible, set out the operational results and financial position of the Government. For example, if the reporting of liabilities is incomplete, this directly affects the reported deficit and financial position of the Government. The consequence is to leave Parliament with an incomplete or misleading picture.

1.11 My conviction is that the primary objective of the Government's summary financial statements must be to provide a clear picture of the Government's overall financial position, including how it has changed since the previous financial statements were tabled. By contrast, the Government describes the current financial statements as "designed primarily to provide an accounting of the financial resources appropriated by Parliament" and "to report compliance with legislative authority."

1.12 Some progress in the matter of clarifying the objectives of the financial statements has been achieved. The Office of the Comptroller General is studying the purposes of summary financial reporting for the Government and the feasibility of developing comprehensive financial statements. Both the Office of the Comptroller General and my Office have provided input to the Public Sector Accounting and Auditing Committee of the Canadian Institute of Chartered Accountants. The Institute has begun to research the appropriate objectives of government financial statements. It anticipates issuing an exposure draft on financial statements for senior levels of government in Canada before the end of 1983. My Office continues to support these important initiatives.

1.13 I am concerned, however, that this disagreement on the objective of the financial statements may be seen as something of a theoretical discussion between accountants. It is far more than that.

1.14 What is insufficiently understood is that those who prepare financial statements must make choices. It is not possible to produce a set of statements that meets every objective.

1.15 It is like map-making. An all-purpose map is not possible. If, on a single map of Canada, we attempted to include federal, provincial and municipal electoral boundaries, geological formations, climatic conditions, economic distribution, population statistics, language groupings, archaeological sites, communication networks, and all the many other things that can be represented on a map, the result would be chaotic, unintelligible and of no use to anyone.

1.16 Map makers must choose what primary information they wish to convey; and their choice will be governed by the needs of the user. Pilots of aircraft, seeking a landing place, would find a map indicating only the sites of convents and cathedrals unhelpful to their needs.

1.17 Similarly, the preparers of financial statements must make choices. And their choices must also be guided by the needs of their users.

1.18 Parliament, on behalf of the people of Canada, makes its decisions based, in large part, on its understanding of the nation's prior financial commitments. Parliament's expressed need, as user, is that the public accounts include audited statements "of the expenditures and revenues of Canada for the fiscal year" and "of such of the assets and liabilities of Canada as in the opinion of the Minister are required to show the financial position of Canada as at the termination of the fiscal year". These needs are set out in the Financial Administration Act.

1.19 In brief, parliamentarians are asking for a financial map to show them where they have been and where they are. Further, it has to help them chart their choices for the future.

1.20 My contention is that, with the Government emphasizing compliance as the primary objective of its statements, it is as though parliamentarians were being handed a road map showing speed limits when their real need is for one showing starting points and present locations. Speed limits are important. So is compliance. But in financial matters, as in travelling, it is even more important to know where you have come from and where you are.

1.21 The increase in the national debt is important to all Canadians. Parliamentarians have the need – and all Canadians the right – to know the actual deficit, the actual debt as precisely as can be stated. My Opinion on the Financial Statements of the Government of Canada illustrates that those amounts would differ by many billions of dollars from what is presented in those statements if the Government were to prepare the statements with the primary aim of providing the clearest possible picture of its overall financial position to the people of Canada.

1.22 The integrity of the summary financial statements is, therefore, not merely a theoretical issue for discussion by accountants. Although economists may be divided on the merits of deficit budgeting, the one certain thing is that there is a direct link between parliamentarians' awareness of the magnitude of the annual deficit and the policies they agree to. Further, there is a direct link between their decisions and the impact of those decisions on such things as inflation, unemployment and the cost of credit – all of which are of vital significance to every Canadian.

1.23 My concern about the integrity of the present summary financial statements is set out in my Opinion and my related Observations on the Financial Statements of the Government of Canada, reproduced in Appendix D. My Opinion includes four reservations relating to failure of the Government to comply with its own stated accounting policy, fragmented reporting of government activities, assets reported as amounts in excess of their value and unrecorded liabilities.

1.24 In including these four reservations in my Opinion, my primary concern is with the integrity of the financial statements as an instrument of information for Parliament. However, the financial statements also speak to a broader constituency – to those who have the responsibility for making, or advising on, a wide variety of decisions within the total financial community. They include economists, bankers and advisers at all levels of government. If the financial statements do not fully present significant information on the real extent of the Government's revenues, expenditures, deficit, financial requirements and debt, then the essential data upon which those decisions are being made become inadequate.

1.25 Individual Canadians, about to make important financial decisions involving the future, need to know where they stand: assets, liabilities, the existence of a sufficient line of credit, an awareness of current expenditures, potential problems with cash flow, the extent of their forthcoming financial requirements. Without that information, no individual should plunge into future financial commitments.

1.26 But the plight of individual Canadians would be made much the worse if they believed that the necessary inventory of financial information had been fully and accurately assembled and, only after entering into new commitments, discovered that their existing expenditures were much higher, lines of credit less adequate, cash flow needs much greater, and long-term requirements vastly more extensive than they had understood them to be.

1.27 As with an individual, so it is with the nation. I cannot emphasize too strongly that critical choices must be and are being made, based on economic interpretations of the summary information contained in Canada's financial statements. If the gap between what is recorded in the accounts and actual economic reality continues to increase, it will become more and more difficult to form judgements on the impact of the deficit and the national debt on the economy.

1.28 Interest rates are being established, the extent of tax revenues are being estimated, decisions on the deployment of resources both in the public and private sector are being contemplated. Each is dependent, to an important degree, on the credibility and completeness of the financial information available.

1.29 In unsure economic times, Canadians have a right to the most relevant and reliable financial map that can be made. If they cannot be assured that the quality of information they are receiving faithfully represents what it purports to represent, they are being denied the financial map they need to have.

1.30 Improving the relevance and usefulness of the information provided in the Financial Statements of the Government of Canada is a matter of urgency for Members of Parliament and all Canadians.

-- Accountability of Crown-owned Corporations

1.31 A major theme of my 1982 annual Report was the accountability of Crown-owned corporations. With the exception of my predecessor's warnings about the state of government financial management in the mid-1970s, no issue involving my Office has captured more public attention than that of the accountability of these Crown-owned corporations. The reason is obvious. A lot of public money is at stake. The accountability framework for what I have referred to as this "sub-government" is inadequate.

1.32 Last year, I concluded that:

Parliament is becoming further isolated from an increasing portion of government activities. The growing practice of using Crown-owned corporations to conduct a widening range of government activities has so strained the capability of the existing accountability framework that Parliament may not be able to exercise its fundamental responsibility for overseeing receipts and expenditures of public funds.

1.33 I stated that, although this Office pressed for improvements in 1976 and 1979, virtually none had occurred. In my 1982 Report, I recommended that:

Broad legislation for the accountability of Crown-owned corporations should be developed that will include provisions relating to each of the elements of authorizing and mandate, financing, directing, controlling and reporting. Such legislation should provide that these corporations be subject to comprehensive audits.

Parliament should give attention to issues surrounding control and accountability of those mixed enterprises and other entities and associates in which the Crown is a shareholder.

1.34 Much attention has been given through the past months to the whole issue of the accountability of Crown-owned corporations. I understand that efforts are continuing; however, this matter is not yet resolved.

1.35 In addressing this issue again, I am aware that there is a discussion of the appropriateness of employing Crown corporations as organizational forms for achieving public policy. I stress that while that discussion is of importance to everyone, my focus, as Auditor General, is solely on the issue of accountability.

1.36 The Public Accounts Committee. Since the tabling of my 1982 annual Report, the Public Accounts Committee has spent a lot of time and effort in investigating the overall accountability of Crown corporations and in examining accountability in specific Crown corporations.

1.37 During November 1982, the Public Accounts Committee considered my Report to the Minister of Agriculture on the comprehensive audit of the Canadian Dairy Commission.

1.38 Between 15 February and 30 June 1983, the Public Accounts Committee held 15 public hearings relating to Crown corporations. The Committee's investigation of the general accountability framework for Crown corporations included testimony from the President of the Treasury Board and from senior executives of Via Rail, CN Marine Inc., Canada Post Corporation and Canadair Limited.

1.39 The Committee issued three reports. The Eighteenth related to the Canadian Dairy Commission. The Nineteenth re-endorsed the previous recommendations made in five major reports to the House of Commons on the subject of the accountability of government-controlled corporations. The Twentieth Report focused on the activities of the Canada Post Corporation, using the accountability framework developed in Chapter 2 of my 1982 Report.

1.40 These reports – which are included in Appendix C – highlight the immediate need for broad legislation to improve the accountability of Crown-owned corporations.

1.41 I anticipate that by the time this annual Report is tabled, a further report, focusing on the activities of Canadair Limited, will have been issued by the Public Accounts Committee.

1.42 The need for improved accountability. I remain concerned about the Government's and Parliament's monitoring and controlling of Crown-owned corporations. During the past year, circumstances in a number of Crown-owned corporations have further illustrated the existing deficiencies. For simplicity, I describe only the events involving Canadair Limited and the Canada Development Investment Corporation (CDIC) to illustrate the continuing accountability deficiencies.

1.43 In 1982, I outlined an accountability framework for legislation comprising the main elements of:

- authorizing and mandate;
- financing;
- directing;

- controlling;
- reporting; and
- auditing.

1.44 It is revealing to examine the situations of Canadair Limited and CDIC using this accountability framework.

1.45 Authorizing and mandate. For appropriate accountability, it is essential that Government and Parliament review and approve the major purposes of a Crown-owned corporation at its creation and that they periodically review the appropriateness of the assigned mandate.

- After accepting ownership of CDIC on 15 September 1982, the Government assigned powers which allow the corporation to participate in almost any economic activity. At present, CDIC manages the affairs of three previously autonomous Crown corporations – Canadair Limited, The de Havilland Aircraft of Canada, Limited and Eldorado Nuclear Limited. Bill C-158, which was tabled for first reading on 25 May 1983, indicates an intent to transfer other Government investments to CDIC. I am concerned that Parliament has had insufficient opportunity to approve the acquisition and the mandate of CDIC or to directly debate how it will function.
- Canadair was acquired in January 1976 for \$46.6 million. Since then, it embarked on the Challenger aircraft program costing a total of \$1.9 billion to December 1982. Except for recent hearings before the Public Accounts Committee, the Finance, Trade and Economic Affairs Committee and the Senate Committee on National Finance, there has been no timely parliamentary review of whether the purposes for which Canadair Limited was acquired are being achieved.

1.46 Financing. Appropriate accountability would require that the need for financial resources be assessed by Government and recommendations made to Parliament on the form (equity, loans, appropriations, etc.) and the effect of the proposed financing on the public purse. Parliament's approval should be obtained before public funds are committed.

- Canadair's Challenger program was financed by the use of Letters of Comfort in excess of \$1 billion, without the prior approval of Parliament. Only after the money was spent did Parliament receive an opportunity to review and discuss this commitment of funds from the public purse. In testimony before the Senate Committee on National Finance, in June 1982, the President of the Treasury Board stated that, in his view, Canadair's use of Letters of Comfort was not appropriate.

- Details of how CDIC will obtain and use required capital and operating funds have not been made clear to Parliament. For example, it is not clear whether proceeds from the possible disposal of any investments that have been transferred to CDIC would be returned direct to the Consolidated Revenue Fund.

1.47 Directing. Appropriate accountability requires that each corporation periodically receive a clear definition of responsibilities, including specification of performance targets. The board of directors should remain autonomous from Government and manage the business and affairs of the corporation. The board should receive clear public direction and guidance about the objectives to be attained by the corporation.

- With respect to Canadair, testimony before the Public Accounts Committee clearly indicated that, when they were appointed, the members of its Board of Directors received no instructions on their role and responsibilities from the Government. Testimony indicated that throughout the period 1976-1982, there was confusion over the role and responsibility of Board members vis-à-vis the Government representative on the Board. In my view, further study of the functioning of boards of directors in Crown corporations is required.
- With respect to CDIC, I am concerned over the possible inappropriate use of the "unanimous shareholder agreement" provision of the Canada Business Corporation Act (CBCA). I believe this provision of the CBCA is intended for and is suitable for use in sole shareholder or closely-held corporations. I think it is not suitable for multi-million dollar corporations owned by the citizens of Canada. The Government has authorized the Minister of State for Social Development to make a written declaration restricting the rights, powers and duties of the Board of Directors of CDIC to manage its business and affairs. The Minister has done so. All rights, powers and duties of the Board of Directors to manage the business and affairs of CDIC, and all obligations and liabilities relating to such rights, powers and duties were effectively transferred to, and assumed by, the Minister. This transfer would appear to eliminate any autonomous functioning of the Board of Directors.

1.48 In this regard, I note that Bill C-153 proposes to permit the Governor in Council to make similar declarations in respect of any Crown corporation where all the shares of capital are held on behalf of Canada or where all the directors have been appointed by a minister or the Governor in Council. The extension of such control over the boards of directors of Crown corporations seems contrary to one of the reasons for establishing the Crown corporation in the first place – a degree of autonomy from the Government and from political decisions. Further, with the potential for weakening the power of the board of directors, the Government may be eliminating an important check and balance on the activities of the Crown corporation concerned.

1.49 Controlling. Appropriate control ensures that means exist for the Government to monitor the activities of Crown-owned corporations on an ongoing basis and to be able to exert control in the event of departures from stated objectives. Classification

under the Financial Administration Act should be consistent with the appropriate level of direction, control and accountability required, and clear criteria for such classification should be established. All corporations should be classified according to the criteria, and each corporation's classification should be reviewed periodically.

- Canadair's reported loss of \$1.4 billion for 1982 illustrates the inadequacy of existing controls. Testimony before the Public Accounts Committee indicates that the Government did not adequately monitor and control the activities of Canadair from 1976 to 1981. Part of this lack of control may be attributable to the fact that Canadair, as a wholly-owned corporation, was never scheduled in the Financial Administration Act and, as a result, was never subject even to that limited level of accountability.
- As a subsidiary of CDIC, it is unclear how Canadair and the other subsidiaries of CDIC will be accountable to the Government and Parliament.

1.50 I would, however, be concerned if legislation directed toward improving the accountability framework for Crown-owned corporations advocated undue reliance by the Government on administrative arrangements and regulations to deal with specific concerns in individual corporations. Crown-owned corporations are entitled to the appropriate degree of autonomy and flexibility to permit them to function effectively in the market-place.

1.51 Reporting. An essential component of the accountability framework lies in providing Parliament with timely, adequate and relevant information on the plans, resource requirements and performance of each Crown-owned corporation.

- Parliament did not receive any report or financial statement from Canadair during the period 1976 to 1982. If such reports had been tabled, Parliament would have been informed and would have had some opportunity to question the investment underlying the guarantees issued by the Government of Canada.
- I am encouraged by the recent quarterly reports issued for Canadair and de Havilland as subsidiaries of CDIC. These reports now present a level of financial disclosure which compares favourably to the standards for conventional public corporations. I am confident that they provide a solid basis for further improvements which will better satisfy Parliament's needs.

1.52 Auditing. The audit mandate prescribed by legislation forms a vital part of the accountability framework by providing assurances to Parliament, the Government, the board of directors, and the management of the corporation. At present, the prescribed audit mandate of many Crown-owned corporations is not broad enough to provide the required assurances.

- The audit mandate relating to Canadair consisted of an attest of financial matters only similar to that prescribed for private sector corporations. This type of audit makes no reference to compliance with government authorities,

nor to identifying and reporting "other matters" uncovered during the audit that might be judged to be of interest to Parliament. Audits of "compliance" and "other matters" are requirements of a legislative audit of a corporation scheduled under the Financial Administration Act. Had Canadair been subject to such an audit, the Government and Parliament might have received earlier warning of the economic and technical problems of the corporation. In my opinion, these problems would certainly have been identified earlier had Canadair been subject to a comprehensive audit with its additional value-for-money focus.

- CDIC is, in effect, a holding company for other large government-owned corporations. The audit mandate for CDIC is prescribed in the FAA. However, the audit mandate for each of its subsidiaries is unclear. It is important that they have an audit mandate at least as broad as CDIC's.

1.53 **Improved legislative auditing.** My Office is concerned both with the quality and consistency of the audit work performed and with the appropriateness of the prescribed audit mandate of each Crown-owned corporation. I am pleased to report that some progress has been achieved on both these fronts during the past year.

1.54 I have given special attention to the standards and consistency of audit practices in Crown-owned corporations. On 17 January 1983, close to 200 senior professionals associated with the audits of Crown corporations met in Ottawa, under the auspices of my Office, for a one-day Workshop, to discuss "Legislative Auditing in Crown Corporations". Private sector auditors of Crown corporations, internal auditors of Crown corporations, representatives from my Office, and provincial auditors, including four provincial Auditors General, frankly discussed and shared their views, experiences and responsibilities in performing and reporting legislative audits of government-owned corporations. I am confident that the Workshop will lead to an increased involvement by the profession in the further development of standards and to a greater consistency in the ways in which legislative audits are performed and reported.

1.55 Last year, I concluded that comprehensive auditing for all wholly-owned Crown corporations was required to ensure a consistent form of independent review for this important and growing part of the public purse. This has not happened. There have been, however, some signs of progress with respect to achieving a broader audit mandate for both internal and external auditors of Crown-owned corporations.

1.56 I have noted during the year that a number of Crown corporations have expanded the audit mandate of their internal auditors to encompass a value-for-money component.

1.57 With respect to external comprehensive audits, the Act creating Canagrex as a Crown corporation includes a section which allows the Auditor General to conduct a

comprehensive audit of the affairs of the corporation where he deems it necessary. I think more Crown corporation legislation should have similar provisions.

1.58 I am not suggesting that my Office is the only organization which can perform such audits. My Office has very extensive experience with comprehensive auditing, but a number of private sector audit firms are also capable of doing this work. There are occasions when Parliament's auditor needs to obtain information and assurances from the management of Crown corporations and their private sector auditors. In those circumstances, I am confident that such information and co-operation will be forthcoming.

1.59 On 29 March 1983, the President of the Canadian Institute of Chartered Accountants (CICA) informed the Public Accounts Committee (PAC) of the CICA's views on the suitability of comprehensive auditing for Crown-owned corporations. CICA's position can be summarized by the following quotation from the letter of the President of CICA to the Chairman of PAC:

The CICA continues to support comprehensive auditing of those Crown corporations for which profit accountability and competitive analysis do not adequately measure performance.

Legislation requiring comprehensive auditing for such Crown corporations would help to improve the accountability of these entities to Parliament, as well as to boards of directors and the government who already have the power to request comprehensive audits.

1.60 In re-addressing the theme of the accountability of Crown-owned corporations, which was a major thrust of my Report one year ago, I wish to make it clear that the Auditor General, an Officer of Parliament, must "call attention to anything that he considers to be of significance and of a nature that should be brought to the attention of the House of Commons." This requires that an appropriate accountability framework exist. Where Government policies are achieved through departments and agencies, a framework for accountability is in place. However, when the Government chooses to fulfil its policies through Crown-owned corporations, the accountability framework is flawed and inadequate.

1.61 The sheer size of the Crown-owned corporations makes the matter of accountability important. Crown-owned corporations employ over a quarter of a million people. With revenues of \$40 billion in the fiscal year ended 31 March 1983 (up from \$31.9 billion in the previous year) and expenses of \$44.2 billion (\$33.7 billion in the previous year), Crown-owned corporations form a huge segment of Canada's total affairs. Their very massiveness demands a proper accountability framework.

1.62 The situation parallels what I have said earlier about the financial statements. There, my concern is with the integrity of the financial information Parliament is receiving. With Crown-owned corporations, my concern is that the information that Government and Parliament are receiving can be incomplete and untimely, and these inadequacies can and

SUMMARY INFORMATION - CROWN CORPORATIONS

Indicators of Size (Note 1)
(31 March 1983 and 1982)

[illegible]

Note:

1. Excluded from the totals for mixed enterprises are amounts for seven international organizations in which, except for one minor instance, Canada has a voting share of less than 10 per cent. Also excluded are 28 non-operating and other minor entities for which information was not readily available.
2. Totals for agency corporations, in 1983 as in 1982, exclude assets and liabilities of the Canada Post Corporation as published financial statements are not yet available. However, postal revenues of \$2,179 million and expenses of \$2,469 million have been included for the year ended 31 March 1983. This compares with \$815 million and \$1,100 million for the period from incorporation on 16 October 1981 to 31 March 1982, as included in 1982.

do exist in the creation, operation and reporting of Crown-owned corporations which are consuming large amounts of tax-raised dollars.

1.63 In my view, it is a situation which must not be permitted to continue. While it does continue, parliamentarians are losing part of their fundamental right to be the representatives of their constituents in the crucial decisions of how tax dollars are to be deployed and accounted for.

1.64 Taken together with my earlier words about the Financial Statements of the Government of Canada, the result is nothing less than the fragmentation of the sovereignty of Parliament.

1.65 **Letters of Comfort.** Last year, I expressed my concern about actions by the Government which had the effect of committing Parliament to supporting troubled companies before Parliament could consider the issues involved. I was particularly concerned with the use of Letters of Comfort to support borrowing by corporations. These letters are documents used by departments and agencies to expedite loans by financial institutions to corporations before formal guarantee by Her Majesty. In practice, they amount to guarantees issued without parliamentary approval.

1.66 I am pleased that our audit work this year disclosed that no new letters of comfort in support of troubled companies had been issued.

1.67 However, I draw attention to two agreements which provide a form of comfort to financial institutions.

1.68 The first relates to Dome Petroleum Ltd.. On 29 September 1982, an agreement in principle was signed by the Government of Canada, four of the major Canadian banks, and Dome Petroleum. The agreement provides, subject to certain preconditions, for purchase by the Government of Canada of \$500 million of debentures of Dome Petroleum through a new Crown corporation to be established with parliamentary approval. The preconditions include approval by Parliament, as well as agreement from the other lenders to Dome Petroleum, approval by the shareholders of Dome Petroleum and significant restructuring of the company's debt.

1.69 Our audit of the Department of Energy, Mines and Resources brought to light another example of comfort. This pertains to Mechron Energy Ltd. (Mechron), a subsidiary of Canertech Inc., which is itself a subsidiary of Petro-Canada.

1.70 The amount involved is, in comparison to the Dome Petroleum agreement, small. But the matter provides a revealing glimpse into the affairs of a company which is only one of a number of subsidiaries of Canertech. It is a reminder of how far removed from

public scrutiny these subsidiaries of a subsidiary of a parent Crown-owned corporation may become.

1.71 As collateral for a bank loan, Mechron has pledged its accounts receivable and inventories and given a debenture of \$1,000,000 on all its assets in favour of the bank. The Corporation (Canertech, wholly-owned by the Government of Canada) has agreed to maintain majority ownership of the Company (Mechron) unless prior written consent is received from the bank. By agreeing to maintain majority ownership of Mechron, comfort is provided to the bank by a corporation wholly-owned by the Government.

Constraints to Productive Management in the Public Service —

1.72 The task continues to ensure that the departments and agencies of government have expended public money for the purposes for which it was appropriated by Parliament, and with due regard to economy and efficiency, and with measures in place to monitor the effectiveness of programs.

1.73 This year, we report on 4 government-wide audits and other studies and 11 comprehensive audits. The main messages from these chapters are at the close of this chapter.

1.74 One of our studies breaks new ground for this Office. It appears as Chapter 2 in this annual Report, entitled "Constraints to Productive Management in the Public Service".

1.75 I believe that this study will be of great interest to all who are concerned about the management of government.

1.76 The study grows out of a concern that was recognized by this Office as long ago as 1978:

As the Public Service Commissioners recently remarked in a public statement, part of the management problems of today "is due to the lesser incentives towards good management that generally characterizes public services, relative to the private sector". The present system of personnel management seems to offer few rewards and incentives – tangible or intangible – for economies in using human resources. In fact, *the system appears to provide actual disincentives for managers to promote the economical and efficient use of resources – human and financial.* (My emphasis)

1.77 The purpose of our special study is to identify and examine the reasons for serious constraints to productive management in the public service. In strict accord with the mandate of this Office, the study defines productive management as management which

"ensures economic, efficient and effective use of public funds and resources – management which produces satisfactory results at a reasonable cost."

1.78 I believe that parliamentarians, representing the mind of the people of Canada, are asking of me not only whether Government is spending tax dollars with the care and prudence that individual Canadians bring to the expenditure of their own income, but also whether that sense of leanness, frugality and urgency in achieving results as efficiently and economically as possible has had any real impact on the management of government.

1.79 The blunt conclusion of our study is that there are indeed serious constraints which make it difficult to improve productive management within the bureaucracy. It identifies three main areas of constraint. First, political priorities have a major impact on productive management. Second, management feels burdened with many administrative and procedural tasks. Third, there are few incentives and many disincentives for productive management.

1.80 The study also makes clear that, underlying these three constraints and contributing to them, is the inescapable complexity of government; a complexity which not only has to do with bigness but with those diverse objectives which are inevitable in the public sector.

1.81 It is important that the reasons underlying this complexity should not be misunderstood. For example, in terms of the political process, two very different kinds of political objectives can contribute to a level of productivity which may be lower than in the private sector.

1.82 The first are political objectives which, one may hope, reflect a Canadian consensus. Federal bilingualism is integral to Canada. Equal opportunity is essential. Canadians recognize the importance of regional parity. The Government of Canada must be a model in its hiring and firing practices.

1.83 However, our study also reports that managers in the public sector, who seek to reduce costs through what would be logical economic proposals in the private sector, claim they frequently find those proposals resisted by a political mind-set that sees all such economies as a reduction in government services rather than an improvement in government productivity. A theme common to the interviews on which much of the study is based is that recommendations by departments for a more thrifty use of resources often meet political resistance.

1.84 If productive management is to improve, then this state of affairs must change. And in this Report, which is addressed to Parliament, I remind parliamentarians that such a change requires an act of political will.

1.85 But it must be definitively understood that this Office is not advocating that all political and social priorities should be sacrificed on some altar of a narrowly-defined productivity. Our study makes it clear that it is the nature of government to fulfil a spectrum of objectives. Value for money is one such objective and one which the mandate of my Office requires me to examine. But I recognize that value for money, in governmental terms, is not measurable in terms of any simple definition of productivity alone. Value is also achieved in social, cultural and broad political imperatives which, by a narrower measure, might be accounted as detracting from productivity. I fully recognize, as does our study and all our auditing, that government, by its very nature, serves a multiplicity of purposes. It is within the context of achieving all those purposes that the productivity of the public service must be measured.

1.86 The second constraint to more productive management identified in the study is the burden placed on management to comply with a very large number of administrative procedures. Many of those interviewed allege that the effective and efficient delivery of services is compromised by the time and energy required to conform with regulations and to meet the expectations of central agencies and other departments.

1.87 The key to understanding the importance of this segment of the study lies in recognizing the need for balancing the requirements of systems for reporting and accountability against the need of the managers to have space to make decisions.

1.88 Through the late 1970s, very important initiatives were taken by government to redress what were perceived as serious inadequacies in its financial management and control systems. Three important factors were involved.

1.89 First, there was a continuing emphasis in this Office's successive annual Reports, from the mid-1970s on, that the provision of adequate financial management and control systems was an urgent and essential requirement. Second, the Office of the Comptroller General was created and a Comptroller General was appointed. Third, the Lambert Commission, with its significant recommendations for improvements in financial management and accountability, reported in March 1979. It is not an exaggeration to say that these three initiatives resulted in a quiet revolution within the bureaucracy.

1.90 Key changes included the establishment of a multi-year fiscal plan, the new Policy and Expenditure Management System and the introduction of the envelope system; and the launching of the Comptroller General's initiative for Improvement in Management Practices and Controls.

1.91 There is no question that these represent important steps toward much improved levels of financial management and accountability.

1.92 However, what our study clearly concludes is that the imposition of largely centralized systems and controls has other consequences. They may not stifle the individual manager's initiative, but they inescapably absorb large amounts of his or her time and energy.

1.93 Now, in fairness, the Lambert Commission – as did the Glassco Commission in the early 1960s – recognized that a balance must be achieved between the constraints imposed on senior managements by the imposition of measurement systems and the counter-balancing need for good managers to have freedom and space to make their own decisions. Our own study recognizes that both sides of the equation are important. However, what the study also reveals is that the balance is difficult to achieve.

1.94 As this Office so clearly recognized through the 1970s – and still recognizes – those systems for compiling information, for measuring, for reporting are crucial and necessary.

1.95 But equally crucial and necessary to productivity and the achievement of results are managers whose time and energy are not consumed by the bureaucratic and time-consuming procedures which the feeding of these systems demands.

1.96 What is clear from the study is that conflicting demands on the time, energy and resources of managers contribute to a morale problem within the public service. The quotations contained in our study reveal high levels of frustration.

1.97 Productive management is, of course, inescapably linked to morale. It may well be that this Office should, within its mandate to monitor whether Parliament is receiving value for money, attempt to report on factors that encourage a sense of worth within individuals.

1.98 The human factor is the crucial factor in achieving value for money – crucial to achieving economy, efficiency and effectiveness in any organization.

1.99 However, that in itself is a mere truism; that men and women are the key resource whether in the public or the private sector. It is the next step which is so difficult to achieve – the creation of a working environment in which individuals can arrive at their greatest level of productivity.

1.100 In that context, our observations on incentives and disincentives toward productive management – the third area of the study – are most important, as are the suggestions at the close of the study.

1.101 I particularly emphasize the observation that if Government wishes to improve value for money and productive management within the public service, it must conclusively demonstrate that that is truly a priority of the Government. The suggestion within the study that Government should consciously set out to establish the core or critical mass of the management talent it will require over the next 20 years is also important. Improvement in productive management, as the study states, ultimately depends on people.

1.102 In this regard, I wish to make clear that my decision to publish this study implies no criticism of individual public servants. Indeed, I believe, our study serves to clarify their role.

1.103 One of the ongoing mysteries to me, since coming to Ottawa three years ago, is that I constantly meet individual public servants, at all levels, who are clearly intelligent, hard-working and imaginative; while, at the same time, I know through the work of my Office that, in too many instances, their energy and intelligence are not resulting in a level of productivity commensurate with their numbers and their ability.

1.104 Our study this year does not supply all the answers to the mystery. But it does point the way. It not only explains the reason for these constraints to productive management but it also emphasizes that the very nature of the public sector must generate different expectations in regard to productive management than are found in the private sector.

1.105 The federal government is huge and complex. Its corridors are a labyrinth. The public servant must learn to operate successfully within all this complexity; a complexity which, as our study makes clear, is, in large measure, integral to the very nature of the governmental process. Other factors contributing to that complexity can be diminished or eliminated. I hope they shall be and that my Office will soon be able to report that some of these constraints are being lifted from the shoulders of our federal public servants.

1.106 Meanwhile, they must continue to do their work, often subject to harsh external criticism to which they cannot respond, amid a never-lessening complexity of demands on their time and energy.

1.107 In summary, while our study of constraints to productive management represents only a modest attempt to probe for the underlying causes of managerial weaknesses in the public service, it provides real insight into the difficulties and challenges of improving productive management in the public service. In particular, it may come to represent the moment when we came fully to understand that the imposition of central controls and government-wide systems, however admirable in intent, can become significantly counter-productive.

1.108 But, while our study suggests that the pendulum can swing too far in the direction of imposing controls and measurement systems, and thus limit or negate the individual manager's ability to innovate, it does not prove that thesis nor even attempt to prove it. It offers suggestions.

1.109 Whether in the public or the private sector, there must be a measuring of the extent to which objectives are achieved. Because of the complexity of objectives in the public sector, the machinery to measure must also be complex. The task is extremely difficult. There is plenty of ammunition for the critics to say it is impossible, that it can never be made cost-effective, that the whole process demands too much time on the part of the departments. But that is to admit defeat before the battle begins.

1.110 The role of government is not going to become less important in our lives; the machinery of government is not going to become less complex; the need to measure how economically, efficiently and effectively the departments and agencies of government and the Crown-owned corporations are achieving their objectives is not going to disappear. However difficult to achieve, the machinery for making those measures must be put in place.

Program Evaluation

1.111 Program evaluation is one such measure. It involves the systematic collection and analysis of information about programs in order to arrive at an assessment of their value and relevance. This activity lies at the very heart of value-for-money management.

1.112 The government-wide audit in Chapter 3 of this year's Report examines program evaluation. Since my Office last reported in 1978 on program effectiveness evaluation, there have been a number of encouraging developments.

1.113 First, the Comptroller General of Canada has established a Program Evaluation Branch which has set out a policy framework for managing and conducting program evaluation in government. This policy framework represents an attempt to make program evaluation a standard tool for public service management and accountability. As far as I am aware, no other industrial society has attempted to implement so comprehensive a policy framework.

1.114 Second, our audit found that considerable progress has been made in setting up departmental evaluation units. This has been done in the 19 departments and agencies included in our government-wide study, and in nearly all the major departments of the government.

1.115 Third, those departments with units have begun to do evaluations of their programs. We found that many of their studies are not as good as they could have been; however, as units do more studies, there is steady improvement.

1.116 Establishing a function like program evaluation on a government-wide basis is not an easy task nor can it be accomplished quickly. Still, the progress to date has been significant. Most evaluation units are in place and carrying out studies. If the progress achieved thus far is to be consolidated and built upon, there must be a renewed emphasis on and support for this function in government. Specifically, this will come in the form of even greater efforts to find and train people in the skills required to do program evaluations. It will come in the form of a willingness on the part of senior managers to devote the time, attention and resources required to ensure that evaluations are relevant and well done. However, the most important catalyst toward speeding and improving the process will come from a demand by deputy ministers, ministers and parliamentarians for quality evaluations. They must not tolerate any fudging of the evaluations. They must further make it seen and known that they are using the evaluations in establishing significant public policies.

1.117 I continue to be concerned about the lack of evaluation of public objectives in Crown-owned corporations. Program evaluation can play an important role in clarifying and assessing the degree to which these bodies are achieving the objectives for which public funds are being used.

1.118 In our work, we encountered instances where programs of an interdepartmental or inter-agency nature are not being evaluated because it is unclear who is accountable for them. Steps must be taken to remedy this, and my Office will be considering whether the broader issues of general accountability for such programs warrant further investigation.

1.119 Finally, I am very concerned that the results of the evaluations of government programs are not getting to Parliament. Since the recommendation on this matter by the Public Accounts Committee in 1980, we can find only one case in which an evaluation report has been tabled in the House. Accordingly, I am making further recommendations this year in an effort to ensure that Parliament receives this vital information. My conviction is that the results of these evaluations are necessary to parliamentarians as they make decisions on behalf of their constituents.

1.120 Nonetheless, I am encouraged by the findings of our audit concerning program evaluation. There are clearly many miles yet to go. But what has already been done in nearly all departments represents a brave attempt to do something vastly complex.

IMPAC Progress Review

1.121 Also, as a matter of importance and interest, I would draw attention to progress in the initiative by the Office of the Comptroller General (OCG) to bring about improved management practices and controls (IMPAC). IMPAC addresses the processes by which programs are planned, controlled and evaluated. It has the objective of achieving more economical, efficient and effective operations within departments and agencies.

1.122 Our progress report is included in Chapter 17. It indicates that steady improvements in management systems are taking place within departments and agencies. As in the case of program evaluation, the task is complex. I welcome the Comptroller General's plan to conduct a formal evaluation of IMPAC in 1984.

A Lack of a Sense of Urgency

1.123 The chapters of this year's annual Report reveal something of a pattern of continuing problems. One which continues to concern me is a lack of any apparent sense of urgency. I cite here several examples, taken from areas which directly affect taxpayers.

1.124 My first example is drawn from our audit of the Department of Energy, Mines and Resources, reported in Chapter 9. It involves the Petroleum Incentive Administration (PIA) which administers two key pieces of the National Energy Program (NEP), the Canadian Ownership and Control Determination Act and the Petroleum Incentives Program.

1.125 An evaluation of PIA with a completion date of 1986 has been scheduled, but will be too late to provide information for use by management at key points in the life of various programs. By April 1985, it is expected that more than \$4.6 billion will have been paid out in incentives.

1.126 Further, monitoring the effects of the incentives program is needed for such an evaluation. This was not being done. Issues that should be monitored include:

- the total costs and benefits of Canadianization and progress toward achieving security of oil supply;
- the net effect of incentives on the level of exploration activity and the success rate of discovery of economic oil reserves since the inception of the program;
- the success of the program in attracting small investors and other sources of Canadian investments to the energy industry;
- the relative costs and expected contribution to oil self-sufficiency of the Beaufort and Hibernia fields;
- the impact on Canadian control in the oil and gas industry of substituting foreign debt for equity; and
- the relative effectiveness of NEP funds invested in exploration incentives and conservation measures.

Given this level of expenditure and the high profile of the program, the monitoring and proposed evaluation timetable should be of serious concern to the Government.

1.127 Another example also occurs in our audit of the Department of Energy, Mines and Resources. A program with which many people are familiar is the Canadian Home Insulation Program (CHIP). A necessity for a formal quality assurance system, monitoring such things as workmanship, has been recognized as a pre-requisite for the program since its inception in 1977. Yet, a 1983 CHIP evaluation comments that there is no such system. Again, the requirement to ensure that desired energy savings were being achieved was integral to the establishment of CHIP, as were the development of benchmark prices for materials used in the program and the need for improved consumer information. The recognition of these needs dates back to 1978. During all that time, however, little happened.

1.128 In fairness, corrective action in these areas is now under way. But the average Canadian must surely ask, what took them so long?

1.129 Our audit of Parks Canada – a program which again directly affects the lives of Canadians – reveals long-standing problems, identified over a number of years, where no apparent sense of urgency exists to take necessary remedial action. These problems include parks where sewage effluent has been polluting local waters. At Banff, it took a serious outbreak of an intestinal disorder to trigger decisive corrective action in regard to water quality and testing.

1.130 Once again, in terms of a service on which Canadians rely, this year's audit of the Department of Transport – Marine Transportation Administration comments on the placement of Vessel Traffic Services (VTS) systems which perform a parallel function for commercial vessels to that which air traffic control systems do for aircraft.

1.131 As long ago as 1973, a Marine Administration study noted a need for an analytical framework that would allow an assessment of the need and an identification of costs and benefits for locating these VTS systems. The assessment was to include where the VTS systems should be located, and in what priority.

1.132 That 1973 requirement was reiterated by Treasury Board in 1975, was raised in this Office's 1979 Report and corroborated by a departmental review in 1979. Action only began in 1980. Meanwhile, over \$100 million had been spent on 12 VTS systems, without adequate analysis of which ports could benefit most.

1.133 I cite these examples of a pervasive lack of any real sense of urgency almost at random from this year's Report. Other instances can be found in our audits of the Department of Communications, Statistics Canada, and the Secretariat of the Department of the Solicitor General.

1.134 The consequences can be disturbing. Another major study in this year's Report

examines the Management of Computing in the Federal Government. In an era where electronic data processing (EDP) is indispensable to the provision of a multitude of governmental services, our study notes "signs that bring into question the government's ability to take prompt and full advantage of the new technology."

1.135 In brief, the question of urgency is itself urgent. I am instructing my auditors to continue to report on all instances where significant delays have occurred, after situations have been identified as requiring prompt action.

Information Needed to Fulfil Audit Responsibilities

1.136 As stated in the Introduction to this Report, for the current fiscal year my staff was provided with all the information and explanations required to fulfil the audit responsibilities of my Office.

1.137 If I am to fulfil those responsibilities, I must be given the opportunity to consider all relevant facts before forming and reporting my opinion. This includes, where I believe it essential, factual information submitted by public servants to ministers for decision-making and ministerial directives to public servants. Without access to such information, where it is necessary, I may not be able to report as required by the Auditor General Act.

1.138 As in 1981 and 1982, my staff continues to encounter some difficulties and delays in obtaining required information. As a result, many more hours of departmental time and of our own time were spent to avoid reporting that I have been denied essential information.

1.139 I have instructed my auditors to continue to request all information necessary for the fulfillment of the responsibilities of the Auditor General Act. If, in the course of the work of my Office, I am denied information which I deem essential to the fulfillment of my statutory audit duties, I will report it to the House of Commons.

Information Resources Management

1.140 There is a different kind of information issue which arises from this year's annual Report.

1.141 One of our government-wide studies – The Management of Computing in the Federal Government – and three of our comprehensive audits – National Library, Public Archives, and Statistics Canada – are directly related to the management of information. In addition, two other studies, Program Evaluation and Management of the Forecasting Process, as well as three additional comprehensive audits, Official Languages, Communications, and Labour, have significant information management components.

1.142 In a philosophical perspective, it is indicative of a strong current within contemporary industrialized societies that information issues should emerge throughout our annual Report. It is a widespread speculation, amounting to a platitude, among some thinkers and writers of our time that our world is moving from an economy based on producing goods to an economy based on producing, disseminating and storing information.

1.143 It is also widely recognized that governments are more and more in the business of compiling and communicating information. Indeed, I am conscious that my own Office is primarily engaged in gathering, processing and publishing information.

1.144 Integral to that information explosion is society's – and Government's – increasing dependence on electronic data processing. It is this dependence which, I believe, makes Chapter 4, "The Management of Computing in the Federal Government", interesting and important.

1.145 I am concerned that, while many of the Government's programs and services are now dependent on the use of computers, there is a serious question as to whether government will be able to take advantage of the new technology which is developing in these years. Our findings reveal that more and more time is being tied up in maintaining and extending systems based on conventional computer technology; that in the area of office automation – so fundamental to the whole apparatus of government – initiatives are sporadic and tentative; that the time may be rapidly approaching when constraints upon the resources available for new EDP development projects can leave the government far behind the private sector; and that a shortage of experienced EDP personnel is probable.

1.146 In such a context, the recommendations included in Chapter 4 become, to my mind, urgent. I welcome the establishment of the Treasury Board's Task Force on Informatics. This is a bold step by Government in addressing a most formidable and complex problem; and, in intent, goes a long way toward responding to the perceived needs for strategic planning for EDP in government.

1.147 The conclusions and recommendations of our study and the establishment of the Task Force are based, in part, on the recognition that improvements in gathering, disseminating and managing information can save significant amounts of money and also improve the efficiency and effectiveness of departments and agencies.

1.148 However, to my mind, there is a broader issue involved, one that has been recognized in the United States and that has affected the audit approach of their General Accounting Office. This is the recognition that managing information resources is no different from managing other traditional resources such as money, people, supplies and materiel.

1.149 Because, in the Canadian context, information has not been specifically recognized as a costly and valuable resource, it has not been subject to principles of resource management. Consequently, there has been little assurance of value for money in federal expenditures for information. This situation virtually guarantees that there exist costly duplication, and an expensive isolationism in terms of the information systems at the federal level.

1.150 As they perform their audits in individual entities, my auditors will be examining whether value for money is being achieved in the management of information resources.

The Role of the Senior Financial Officers

1.151 During 1982-83, we conducted a study to examine the role of Senior Financial Officers in light of previous findings and the current and future needs of the Government of Canada.

1.152 This study does not appear as a chapter in the Report; however, I am summarizing its conclusions here, because I believe them to be of interest and significance.

1.153 The Glassco Commission, our 1975 Financial Management and Control Study and the Lambert Commission all concluded that the Senior Financial Officers in departments did not always play an effective role, and their function did not contribute adequately to senior management decisions.

1.154 However, the increasing emphasis on accountability in government and the new Policy and Expenditure Management System (PEMS) are making it necessary for Senior Financial Officers to play an expanded role. There is now an urgent need for them to provide advice to senior management on the implications of new policy and resource allocation proposals and to ensure the integration of the departmental planning and financial management processes as well as the compatibility of the various information systems.

1.155 Our 1982-1983 study reveals that, in most of the traditional areas of financial management, there has been a marked improvement in the organization and responsibilities of the financial function. For example, in the 35 entities included in our examination, all Senior Financial Officers are members of the Senior Management Committee and report direct to the Deputy Head. In all cases, they are fully responsible for the design, implementation and maintenance of the financial management and control systems. They also advise management on the application of legislation, directives and policies on financial matters. In addition, Senior Financial Officers are providing more guidance and direction to staff performing financial management and control duties within departments. They also participate in selecting, training and evaluating most of the staff involved in the financial function.

1.156 However, we noted that, for the most part, Senior Financial Officers are providing only a limited independent review and analysis of the various planning and resource proposals prepared within departments. I do not question that the responsibility for the substance of these proposals belongs to the individual operating managers. However, Senior Financial Officers are able to review and provide objective advice on the validity of assumptions, data and cost for the individual proposals as well as implications for the department as a whole.

1.157 In most of the entities reviewed, we found that Senior Financial Officers are responsible for preparing the Budget-year Operational Plan and the Estimates. However, responsibility for preparing the Multi-year Operational Plans often rests with planning units outside finance. As a result, there is no assurance that the operational plans are sufficiently integrated with the financial control and reporting processes. Only the integration of the two can guarantee that relevant costs are matched with expected and actual outputs. Senior Financial Officers, because of their responsibilities for the Budget-year Operational Plan and financial systems, are well qualified to achieve and maintain this integration. They should, therefore, normally be responsible for ensuring that appropriate planning procedures are in place. This responsibility would not extend to preparing plans but would include issuing guidelines, formatting, timetabling, assembling information, costing inputs and reviewing the assumptions and productivity measures listed in the plans.

1.158 At the overall department level, variance analysis, for the most part, is restricted to comparing expenditures to budgets. In only a few instances was this analysis extended to include comparisons with planned results, outputs achieved and measures of performance. However, we found that there is an increased awareness of the need to make such comparisons and to monitor and evaluate the effects of managerial decisions. For example, PEMS is forcing managers to provide a lot of cost and performance-based information. To meet these increased demands for data, many new computer-based information systems have been set up in most departments. Although responsibility for financial systems is clearly vested with Senior Financial Officers, the responsibility for developing, operating and maintaining other information systems is fragmented and often unclear. This situation exemplifies my concern about the failure to recognize information as a resource.

1.159 As a result, there is no guarantee that the various systems being developed are compatible, avoid duplication, use valid data and provide the appropriate information. Since Senior Financial Officers already have responsibility for the financial systems, they are in the best position to ensure that the systems being developed will provide for integrating financial and non-financial data. This will facilitate the production of meaningful performance reports. It is, therefore, appropriate that Senior Financial Officers should be consulted on and have input into the development of all management information systems.

1.160 The Office of the Comptroller General has recognized the need for a restructured role for the Senior Financial Officer and has circulated a discussion paper titled, "The Comptrollership Concept in Departments and Agencies of the Government of Canada". If implemented, the expanded role of the departmental comptroller, as defined in this paper, would serve as a benchmark for departments and agencies and would help to overcome most of the weaknesses noted above.

The Office of the Auditor General and the House of Commons

1.161 On 3 August 1982, the Honourable Jeanne Sauv , Speaker of the House, asked me to conduct a follow-up of our 1980 comprehensive audit report on the House of Commons. Madame Sauv  and I agreed that the follow-up would concentrate on those areas covered in the 1980 Report – organization and administration, personnel, and financial systems and practices of the House. We also agreed that it would be appropriate to meet with a number of Members of Parliament during the follow-up to obtain their views on the administrative changes since 1980 and on the quality and level of existing House administrative and support services.

1.162 Our follow-up included interviews with 31 Members and a meeting with the Management and Members' Services Committee.

1.163 In sending the Report of the follow-up to Madame Speaker on 25 May 1983, I was pleased to be able to say:

It is gratifying to note the significant improvements that have occurred since our 1980 comprehensive audit. You must be as pleased as I with this rapid progress toward improved management practices and increased concern for value for money in the administration of the House of Commons.

1.164 Madame Sauv , in her reply, wrote:

It is my hope that, with the guidance and direction provided through this evaluation, we can continue to initiate reform and consolidate our progress so as to best utilize those resources available within the House of Commons.

Boards

1.165 In my earlier observations on the accountability of Crown-owned corporations, I expressed my misgiving that the use of the "unanimous shareholder agreement" provision of the Canada Business Corporations Act effectively eliminates any autonomous functioning of a board of directors.

1.166 Our audit of the National Library of Canada – Chapter 14 in this Report –

reveals a rather different concern about the function of a board. Here we have a different kind of board whose role needs clarifying.

1.167 Our audit of Parks Canada, reported in Chapter 10, found that the Historic Sites and Monuments Board of Canada, yet another type of board, has become so integrated with the affairs of Parks Canada that "the independence of the Board could be jeopardized" and the Minister and Parliament cannot "know the full costs of operating the Board and, therefore, cannot hold it accountable."

1.168 These instances, together with those in previous reports of my Office, suggest that there are some fundamental aspects of board operations in entities that are instruments of governmental policy about which Members of Parliament could well be asking value-for-money and accountability questions. These include questions about boards' roles, criteria for appointment to boards and criteria for assessing their performance.

1.169 Because of the significance of boards to the achievement of value for money, we plan to make boards the subject of review in the next year.

Main Messages in the 1983 Report ✂

1.170 We organize our audit activities so that teams cover each department and agency. Depending on the scope of the audit in a given year, a team may be a small group of professionals trained in financial audit, or may include various specialists from other disciplines. We also organize a number of special audits and studies each year that draw on information from a group of departments sufficient to be statistically representative of the public service. These are referred to as government-wide audits and studies. They have to do with a particular theme; examples this year are our study of constraints to productive management in the public service and our audit of program evaluation.

1.171 Where, in our opinion, findings of the auditors warrant, we devote a chapter of this annual Report to the work of each team. I am, however, aware that it may be helpful to those reading our Report to have the main messages in one place. Therefore, as I did last year, I conclude this chapter on matters of special importance and interest with the main messages from the Report. A main message is, of course, a very short summary. The synopsis toward the beginning of each chapter provides an overview. However, I caution the reader that, for an in-depth analysis and to understand the context and implications of the main messages, the chapter itself must be read.

Program Evaluation (Chapter 3)

- The government has made significant progress in establishing program evaluation functions in departments and agencies. All 19 departments and agencies in our audit sample have established corporate program evaluation units. Most have developed policies, had them approved by the deputy head and prepared plans to evaluate their programs on a cyclical basis.
- Departments and agencies have made considerable progress in planning and carrying out corporate program evaluations. Seventeen of the 19 in our sample have evaluation studies in progress. The corporate evaluation units in 15 of the departments have completed at least one program evaluation study; in total they have completed 86. Government-wide, 174 have been completed. Most of this has been accomplished in the past three years. Of the 19 departments and agencies in our audit, only the National Parole Board and the Solicitor General Secretariat have not attempted any corporate evaluation assessments (the planning documents for a study) or studies.
- In departments with relatively longer experience and in which a trend can be examined, there have been improvements in the quality of evaluation initiatives undertaken.
- However, over half of the evaluation assessments audited did not form an adequate basis for sound advice to the deputy for planning evaluation studies. In a number of cases, limitations in the study could be traced to deficiencies in the assessment.
- Moreover, in a substantial number of the evaluation studies, there were significant weaknesses in the methods used to accomplish the work planned for them. This was particularly so with respect to measuring program effectiveness. Most of the study reports gave some, but not always full, recognition to these weaknesses in the way in which the findings were qualified.
- Even where difficulties were encountered in planning and carrying them out, in most cases, parts of the assessments and studies have produced information that is sound and has been found useful by departmental managers. In most instances, senior management has accepted and acted on the recommendations arising from these studies.
- To give direction to departments in establishing a program evaluation function, the Office of the Comptroller General has published detailed guidelines for organizing, planning and conducting evaluations. In our opinion, this policy framework represents a reasonable standard.

The Management of Computing in the Federal Government (Chapter 4)

- Most government electronic data processing (EDP) is based on the conventional technology of the 1970s. Examining the way that kind of EDP is managed in a sample of departments, we found:

- some budget overruns and many late deliveries in systems development projects;
 - a need for strengthened management controls over the systems development process, especially in project monitoring and cost accounting;
 - improvement required in the methods used to determine the EDP needs of government programs which depend on the computer;
 - a lack of preparedness to run critically important computer systems on alternative computer sites, when a prolonged computer outage occurs at a main site;
 - a need for strategic planning to be carried out within the longer time frame required to meet the long lead times needed to develop software, acquire hardware, and build up an expert staff.
- Looking to the future, we found reason for concern that the government will not be able to make selective and appropriate use of the new microprocessor and telecommunications-based EDP technology emerging in the 1980s, unless a better co-ordinated and more determined approach can be made to the problem. Much of our concern centres on the availability of experienced EDP staff to adapt this new technology to the government's needs. The present staff is very largely involved in maintaining and enhancing existing computer applications, and this involvement increases as new conventional systems are developed and extended.

Management of the Forecasting Process – Department of Finance (Chapter 5)

- The Department of Finance prepares regular forecasts of the Canadian economy. Variables from the forecasts are used in calculating interim fiscal transfer payments to the provinces that will amount to over \$24 billion in 1983-84. The forecasts prepared by the Department are also key inputs into the federal budgets and are viewed by governments and the private sector as authoritative statements on the direction of the Canadian economy.
- The forecasting process of the Department of Finance is informal. The individuals involved in the process have a clear and consistent understanding of the steps involved, but there was no evidence that such steps are actually followed. At the time of the audit, there were no written procedures setting out the process or the management controls over the process, which would include reviewing assumptions and inputs, reviewing the forecasts prior to using them, or periodically evaluating forecast results. For the most part, management assumes that all steps of the process, including verification, are carried out in an efficient way. Therefore, in the absence of any formal management controls, the consistency, integrity and efficiency of the process depend almost completely on individuals performing their responsibilities in a totally professional manner and on staff continuity. Failure to perform all necessary procedures at the required time could precipitate errors that could affect the quality of the forecasts.

- Security over confidential information relating to the latest forecast of the Canadian economy is weak, because the Department does not have adequate security arrangements. Unauthorized persons could access this information. Premature release of these data could have an impact on financial markets. Many deficiencies in this area, identified by the RCMP in 1979-80, have not been addressed.
- There is no departmental EDP policy or EDP co-ordinator. This could be a contributing factor in deficiencies noted in the co-ordination of EDP activities and also in EDP security.

Commissioner of Official Languages (Chapter 6)

- The nature of the Commissioner's mandate, as set out in the Official Languages Act, and the evolution and growth of the activities of his Office over the years are the causes of overlap of responsibilities with other federal agencies dealing with official languages, some of which is inevitable to preserve the independence of the Commissioner. However, the Commissioner keeps Parliament well informed of his activities and new initiatives through his Annual Report and through the Parliamentary Committee on Official Languages.
- The Commissioner's Office does not have sufficient information on the utilization and performance of its human resources. It is consequently not in a position to determine adequately the efficiency of its activities.
- The Office has not established a policy or plan for evaluating the effectiveness of its programs. Nevertheless, evaluations of a limited scope have been done on the language kits, to which \$7 million has been committed since 1975. For an entity of this size, these evaluations represent an acceptable achievement.

Department of Communications (Chapter 7)

- In our 1978 Report, we identified weaknesses in several areas of the Communications program. Some of these have been corrected. However, there are significant areas where weaknesses previously observed still exist or are just now being addressed. These include cost recovery practices, internal audit and inventory control.
- Controls over the policy development process are incomplete. Specific activities necessary to support the development of policy issues are not systematically planned and monitored.
- The deficit for the Radio Frequency Spectrum Management activity in 1981-82 was \$23.4 million, despite Cabinet direction that it operate on a full-cost-recovery basis.
- Clear and measureable objectives were not defined for the Arts and Culture program either before or after its transfer to the Department from the Department of the Secretary of State in July 1980.

- The 1982-83 Estimates for the Arts and Culture program provided for a subsidy of \$220 million to Canada Post Corporation to cover losses incurred as a result of preferential rates for publication mailings. No clear objectives have been set by the Department for this subsidy. In 1983-84, the Department will be responsible for only \$53 million of this subsidy, with the remainder provided from the Consolidated Revenue Fund.
- No significant effort to evaluate departmental programs was begun until 1982. Despite the absence of evaluation information requested by Cabinet, the Department has requested and obtained renewal of two programs originally scheduled for termination. These are the Canadian Book Publishing Development Program and the Special Program of Cultural Initiatives.
- The Space Sector met the criteria used to assess project planning and control.

Employment and Immigration Canada (Chapter 8)

- The Canada Employment and Immigration Commission has adopted action plans and undertaken corrective action in many of the sectors we audited. It is too early to determine the extent to which these actions will have the desired effect.
- Functional managers have not always ensured that there was a continuous monitoring of operations. The organizational structure makes it difficult to co-ordinate promotion of programs offered to the public.
- Quality control and quality assurance are not applied to unemployment insurance benefit claims in all regions. In addition, we found that the Commission was not analysing the overall cause of errors detected by this control. Investigation and control systems implemented to reduce the number of overpayments are centred mainly on detection; the preventive aspect is neglected.
- Based on our examination of some contribution programs, the selection of projects meets program objectives and criteria. However, the monitoring of projects was not properly supervised, and the results of the monitoring activities were not adequately documented.
- The National Employment Services group exercises little direction and co-ordination over the regions.
- The Commission does not determine its future human resource needs in a detailed and systematic manner. In addition, it does not have in place the mechanisms needed to co-ordinate its training activities.
- The Systems and Procedures group carries out well its responsibilities for issuing Unemployment Insurance cheques. However, policies, directives and data processing standards are too general and not up to date.
- CEIC has developed standards, productivity measures and an information system; however, the system does not measure efficiency.

- The quality of evaluation studies has improved over the past few years. The Internal Audit Bureau should improve its staffing plan so it will provide for its needs.
- The Unemployment Insurance Account deficit for the 1982 period exceeds \$2.5 billion, and forecasts indicate another major deficit for 1983.

Energy, Mines and Resources – Energy Program (Chapter 9)

- The 1980 National Energy Program (NEP) is a major government initiative comprising a collection of over 40 programs and involving some \$5.3 billion of expenditures in 1982-83. A tremendous variety of programs is included within the initiative – new and old programs; large and small; simple and complex. Some deal with a limited number of participants (individuals and groups involved in oil exploration), others, such as the Canadian Home Insulation Program (CHIP) and the Canada Oil Substitution Program (COSP), involve hundreds of thousands of claimants in a year.
- The implementation and operation of such a large number and variety of programs, in rapidly changing circumstances and under strong time pressures, have proven to be a major management challenge. With some exceptions, the challenge has been met. A contributing factor has been the enthusiasm and dedication of managers and staff who have worked long and hard during the period since 1980. Most programs we audited are now up and running and are generally well administered. However, improvements are needed in some areas.
- Our audit of selected programs showed that pre-implementation planning, monitoring, proper assignment of resources, and the will and ability to take corrective action are important factors in successful program delivery. We observed that, although programs such as the Distribution System Expansion Program, the Canada Oil Substitution Program, and the Industrial Conversion Assistance Program have been well implemented in this respect, other programs such as the Canadian Home Insulation Program, the Forest Industry Renewable Energy Program, and the Conservation and Renewable Energy Demonstration Agreements and Propane Vehicle Grants have not. In particular:
 - pre-implementation planning has been inadequate in some cases, and the links between the policy-setting and program operating levels have sometimes been weak;
 - ongoing monitoring of program procedures needs improvement in a number of cases, and evaluation of early effects and impacts should be carried out for most programs;
 - the resources assigned to some programs have been so limited that due regard for economy, efficiency and effectiveness in program delivery has not been possible; and
 - there have been delays in taking corrective action in some cases, even after repeated indications of a need for such action.

- The Department has adopted a policy for program evaluation and has established evaluation procedures that conform to government guidelines. Now that the function is established, there is a need to plan and carry out evaluations on a timely basis so that such evaluations can contribute to improving the management and effectiveness of the energy programs.
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- The Canadian Ownership Account was established in 1980 by the National Energy Program. In our 1982 Report, we commented, in connection with the \$1.7 billion acquisition of Petrofina Canada Inc. by Petro-Canada, that there is "a serious weakness in the management of public funds when departmental and central agency officials have had no responsibility to ensure that due regard to economy is demonstrated and value for money achieved." We have continued our investigation into this matter during the last year and are still unable to assure Parliament that due regard for economy was demonstrated and value for money achieved in regard to this major acquisition.

Department of the Environment – Parks Canada Program (Chapter 10)

- Parks Canada employees at individual parks, historic sites and canals display a high degree of commitment to both meeting the needs of visitors and preserving the natural and historical heritage within the parks and sites under their jurisdiction.
- Initiatives taken by Parks Canada toward completion of the Cabinet-approved National Parks System and the establishment of national historic parks recommended by the Historic Sites and Monuments Board have been implemented without sufficient consideration of the total future cost implications. As a consequence, funding and appropriation decisions for expenditures on the acquisition, development, operation and maintenance of new assets have not and cannot be considered within the context of total future financial requirements.
- Parks Canada does not provide the information necessary to indicate how well it is fulfilling its mandate, nor does it have formal procedures to hold its employees accountable for producing the results necessary for delivering its program.
- Parks Canada has not managed certain of its professional staff resources in a manner that would ensure their most effective use in program delivery.
- Parks Canada has not determined the most appropriate approach to follow in dealing with the future of the townsites of Banff and Jasper in the context of their impact on program resources and objectives.
- Parks Canada's philosophy and policy relating to visitor-generated revenue result in visitors being treated inconsistently and receiving subsidized services.

- Parks Canada management was aware of several of the problems observed during our audit and, in some instances, had either initiated corrective action or was contemplating doing so.

Department of Labour (Chapter 11)

- During the course of our audit, substantial changes were made in the Department's senior management. The Department has indicated, in response to our recommendations, that it is taking positive action to resolve the problems noted.
- One of the Department's responsibilities is to ensure that workers under federal jurisdiction have a safe and healthy workplace. In carrying out this mandate, Regional Operations responds to all complaints concerning unsafe and unhealthy working conditions and, as far as resources allow, performs planned safety inspections. We found that Regional Operations had inaccurate, incomplete and out-of-date information on its clientele, was not fully aware of where its resources were expended, did not ensure that serious hazards identified had been rectified, and did not know whether the frequency and severity of accidents were actually being affected by its efforts. In addition, when performing planned safety inspections, Regional Operations did not focus on those industries with the highest risk of accidents.
- Management had not demonstrated due regard for efficiency in administering the Government Employees Compensation Act. We noted that computerizing the processing of claims would save at least \$375,000 annually.
- The Department has a responsibility to help resolve industrial disputes in the federal jurisdiction. We determined that there were no major problems in the management controls in place to ensure economy and efficiency.

Secretariat of the Solicitor General (Chapter 12)

- The role of the Secretariat of the Solicitor General is complex in that it is required to interact with all the major participants in the Canadian criminal justice system in carrying out its mandate to provide policy advice to the Solicitor General as well as develop and participate in major criminal justice and national security initiatives. Following its creation in 1973, there was some uncertainty concerning the most appropriate role for the Secretariat, and it is only recently that a clearer role has emerged.
- With its role clarified, the Secretariat is now starting to address weaknesses in its planning, control and evaluation systems. For example, it has recently established long-term goals and short-term objectives and identified departmental priorities. However, it has not yet developed appropriate criteria or procedures for allocating its resources or monitoring progress in relation to these objectives and priorities.

Department of Transport – Marine Transportation Program (Chapter 13)

- The Department has made substantial efforts to provide Canadian mariners with an extensive, reliable and safe system of marine navigation. Although the Department has identified many of the areas requiring improvement noted in this chapter, its actions have not yet resulted in significant change.
- The Department is spending more than \$525 million annually on Coast Guard activities to provide a variety of services to mariners, such as operating marine navigation aids and providing ice breaking services. It has neither adequately analysed the needs of mariners for these services nor defined the level of service to be provided. As a result, the Department's ability to plan and control Coast Guard activities is weakened.
- Marine transportation is a heavily subsidized means of transport in Canada. The implications of adopting a policy of cost recovery for the Coast Guard were evaluated in 1981. Cost recovery could have an important influence on the demand for marine services and, as a result, on the levels of service. We were informed that the Government has not yet agreed to implement such a policy.
- The Department's Fleet Capital Investment Plan indicates that approximately \$2.5 billion will be required over 30 years to replace 49 major vessels. We have serious concerns that this plan is not yet founded on sufficient analysis of need, defined levels of service and the most cost-effective approaches to program delivery.
- In 1982-83, the Canadian Coast Guard spent \$250 million on aids to navigation, of which \$185 million was operating costs. There is an opportunity to reduce these costs by \$10 million to \$20 million annually by accelerating the unmanning of lighthouses, by revising standards and methods for checking and maintaining buoys and by re-examining the need for each of the 12 vessel traffic service systems. Further substantial savings would be possible if defining levels of service in concert with these improved efficiencies indicated that a reduction in the size of the fleet was possible.
- Although the Department collects data on the accidents it investigates, it does not systematically analyse all the data to monitor relative levels of marine safety by type of traffic and degree of risk. Such analysis could assist the Department in recognizing accident patterns and in planning appropriate and timely action.

National Library of Canada (Chapter 14)

- The National Library has an effective means of collecting all Canadian published work, one of its prime responsibilities. The Library now needs to assess the adequacy of its resources and effort committed to preservation, to counteract physical deterioration of its collection.
- The Library has lacked an adequate planning process that provides clear statements of National Library objectives to guide its managers and serve as a basis for senior management control and accountability. Management is taking steps to address the problem. The issues include the leadership role of the National Library in the

development of networks in Canada for inter-library lending and information exchange, and its co-ordinating role for library services in the federal government.

- The Library has a complex computer system that has been a major expense in the Library's budget and has experienced significant development problems. Management needs to reassess the scope and role of the system in the light of current needs and EDP technology and develop a realistic plan for providing future automation service for the National Library and other federal libraries. As Chapter 4 suggests, the National Library is not alone with EDP systems problems.
- In our view, the National Library Advisory Board should have a clearer and stronger review role within its advisory mandate to help ensure value for money in the Library's operations.

Public Archives of Canada (Chapter 15)

- For greater accountability to Parliament, the Archives needs to clarify its role in relation to other archival institutions in Canada and clarify its own acquisition policies. This has become increasingly necessary with changes in user needs and resource limitations.
- The Archives has taken important initiatives in developing techniques for the long-term preservation of its records, but management lacks information on the condition of the Archives' collections and needs to develop long-term plans that ensure a co-ordinated approach to preservation.
- The Public Archives of Canada plays a central role in the management of government records. The quality of records management in government affects not only the safeguarding of historically valuable government records but also efficiency in government operations and public access to information. Under a 1966 Order in Council, the Archives has had a duty to evaluate and report annually to Treasury Board on the state of records management in government. It submitted only three reports between 1966 and 1983. The latest survey, reported in 1983, found that 19 per cent of the departments had no schedules governing records maintenance and disposal, and 48 per cent did not have a majority of their records scheduled. The Archives needs to sort out with Treasury Board how it will carry out its government-wide evaluation and advisory responsibilities under the new 1983 Treasury Board administrative policy for departmental records management.

Statistics Canada (Chapter 16)

- Statistics Canada has a sound international reputation for its professional work. Nonetheless, there is a need to strengthen controls over the quality of its statistics and disclosure of their limitations to users.
- The Agency's statistics are objectively prepared and its products are generally relevant. However, the Agency's means for ensuring balance in its programs need improvement.

- The Agency has made commendable efforts to control the burden placed on the business community and on individuals for information.
- Statistics Canada takes precautions to protect the confidentiality of respondents.
- Management practices need further significant improvement in the key areas of planning, allocating resources, measuring the performance of programs, and internal audit.
- Largely because of a lack of appropriate management practices, the productivity of clerical staff tested in our audit was well below acceptable levels. The Agency has recognized the problem and appears to be taking steps to address it.
- There is evidence that a large number of clerical positions throughout the Agency may not be properly classified. This matter is under review by management and the Treasury Board.
- The Agency has recently prepared a plan which calls for major improvements in its management practices by December 1984. Based on past experience, we believe that the implementation of the plan will need to be closely monitored if this target date is to be met.

Additional Audit Observations (Chapter 17)

- This chapter contains additional matters of significance that I believe should be drawn to the attention of the House of Commons. They have not been reported in either the departmental chapters or the government-wide studies, but have come to our attention during our audits of the accounts of Canada. They deserve close scrutiny.

**CONSTRAINTS TO PRODUCTIVE MANAGEMENT
IN THE PUBLIC SERVICE**

CONSTRAINTS TO PRODUCTIVE MANAGEMENT IN THE PUBLIC SERVICE

Table of Contents

	Paragraph	Page
Overview	2.1	53
The Study	2.7	54
Three Significant Constraints to Productive Management	2.13	55
Political Priorities Have a Major Impact on Productive Management	2.17	56
Management Feels Unduly Constrained by Administrative Procedures and Conflicting Accountability Requirements	2.32	60
There Are Few Incentives for Productive Management, but Many Disincentives	2.57	70
How Organizations Have Attempted to Improve Productive Management	2.64	73
Improvements in the Public Service of Canada	2.65	73
Other Public Services	2.71	75
Private Sector Organizations	2.79	76
Conclusions and Suggestions	2.83	77
Make Productive Management a Key Priority	2.101	84
Encourage and Support Productive Management	2.103	84
Reduce Disincentives, Increase Managerial Authority and Clarify Accountability	2.106	85
Emphasize the Development of Managers	2.112	85
Support Experiments to Improve Productive Management	2.115	86
A Final Note	2.119	87

	Page
Exhibits	
2.1 The Political Process and Management. Excerpts from Interviews with Public Service Executives	59
2.2 Top Ten Constraints as Reported by Public Service Executives Interviewed	62
2.3 Departmental Accountability Relationships	64
2.4 Case 1: Reconciling Conflicting Priorities: Controlling Toxic Chemicals	65
2.5 Case 2: Reconciling Conflicting Demands: Reclassifying Positions	66
2.6 Case 3: Reconciling Conflicting Mandates: Purchasing a Printing Press	67
2.7 Management Authority and Accountability in the Public Service. Excerpts from Interviews with Public Service Executives	69
2.8 Incentives and Disincentives to Productive Management. Excerpts from Interviews with Public Service Executives	72
2.9 Myths About Public Service Management. Excerpts from Interviews with Public and Private Sector Executives, Discounting Myths About the Public Service	79
2.10 How Could Productive Management be Improved in the Public Service? Excerpts from Interviews with Public Service Executives	82

CONSTRAINTS TO PRODUCTIVE MANAGEMENT IN THE PUBLIC SERVICE

Overview

2.1 In our comprehensive audits, we have commented on management problems in the public service. We have also noted instances of improvement in management practices over the years. But one of our most troublesome findings has been that many management problems persist in spite of efforts to overcome them. There seem to be characteristics in the public service environment that make it difficult for managers to focus on productive management; that is to say, to concentrate on economy, efficiency and effectiveness and ensure that satisfactory results are achieved at reasonable cost. To understand better why the development and implementation of management improvements seem to be so difficult, slow and sometimes incomplete, we undertook this special study.

2.2 The growth of public expenditures and the size of the federal deficit have become public concerns. The federal government, as well as other governments, has been faced with pressures to improve services without increasing the size of the budget. More productive management has been suggested as one way to provide the same or an even better level of services with fewer public funds.

2.3 Despite the widespread interest in achieving greater value for money, governments have found it difficult to achieve this goal. Different approaches have been tried in various countries, with mixed results. There appear to be significant gaps in understanding management problems, their underlying causes and how to overcome them in public service organizations. The aim of this chapter is to contribute toward a better understanding of these difficulties by our own Office, and to assist Parliament, Government, Cabinet and managers in finding a way to achieve greater value for money in the public service of Canada.

2.4 During our study, we interviewed many public service executives. They indicated that undue constraints stand in the way of achieving greater value for money in the public service. They mean the impact of political priorities on the management process, the degree of administrative procedures with which managers have to cope, and the disincentives to productive management that are characteristic of the public service.

2.5 In some cases, these constraints seem to be more the perception of managers than the reality of the situation, and they can no doubt be used as excuses. Also, certain constraints are part of the nature of government and may be very difficult to change. Nevertheless, it was the consensus of the majority of the executives we interviewed that these three constraints shape the management environment of the public service and that they have a significant impact on attempts to improve productive management.

2.6 The effect of constraints on productive management in the public service is that achievement of value for money is generally accorded a low priority and that managers are frustrated and lack motivation when it comes to making productivity improvements. If some of these constraints were recognized and modified, and if a deliberate effort were made to establish an environment that encourages managers to achieve satisfactory results at reasonable cost, significant improvements could be made in achieving value for money.

The Study

2.7 For a number of years, our comprehensive audits of government departments and agencies have reported cases where managers have not demonstrated due regard for value for money. They also noted, however, that there have been conscientious efforts to overcome these weaknesses. Departments have installed control systems, measurement systems and reporting systems to assist good managers and to prevent poor ones from mismanaging. Still, our audits showed that satisfactory achievement of value for money was elusive. Our 1980 Report described the problem in the following words:

In essence, then, what our observations over the last few years suggest is that the best management systems and controls devised for government will not overcome the fundamental problems revealed by our findings, and confirmed by others, unless and until there is real desire and commitment on the part of decision makers at all levels – the will, both in Parliament and in the Government – to create an environment in which public service managers have the necessary means and incentives for achieving economic, efficient and effective management of public funds and resources.

2.8 Members of the Public Accounts Committee, too, have voiced concerns about the persistence of management problems in the public service. They have, at times, questioned whether the net effect of more control systems and administrative regulations is beneficial.

2.9 Prompted by these concerns, we undertook this study. Because of the necessarily broad scope of our first endeavour in this area, and because of the complex, ill-defined nature of the problem, we conducted an exploratory study rather than an audit, which would have relied more on documented or physical evidence as prescribed by generally accepted auditing standards.

2.10 There exists only a limited amount of research data that is specifically related to this area. Hence, we sought to build our own information base by probing the knowledge and understanding of individuals who are most familiar with the realities of managing government programs. The study, therefore, relies to a considerable extent on the perception and interpretation of managers and on the analysis of management situations described to us during interviews with a cross-section of senior executives.

2.11 During our study, we interviewed about 170 senior executives in the public service. These executives were carefully selected to include a number of deputy ministers, and a representative cross-section of assistant deputy ministers, directors general and directors. In addition, we interviewed about 30 senior professionals in our Office with experience in auditing public sector organizations. We also reviewed management reforms in the public service over the past 20 years and the academic literature on public sector management. Finally, we interviewed 25 presidents and chairmen of private sector corporations for purposes of comparison, and examined management environments in other government jurisdictions within and outside Canada.

2.12 The result of this research was a large amount of information about many aspects of public sector management. During our assessment of this information, a number of significant aspects emerged. Gradually, these crystallized into a consistent pattern which then formed the framework for this chapter. Our conclusions and suggestions are presented in the hope that they may serve as a basis for finding a way to achieve significant management improvements in the public service of Canada.

Three Significant Constraints to Productive Management

2.13 The principal realization arising out of our study is that there are significant constraints to productive management in the public service. By productive management, we mean management that achieves value for money. That is to say, management that ensures economic, efficient and effective use of public funds and resources – management that produces satisfactory results at reasonable cost.

2.14 There is, in our view, no single cause to which these constraints can be attributed. The nature of government everywhere seems to be such that constraints to productive management keep emerging almost inadvertently and steadily over time. We found this to be the case in all public services we examined. We observed that such constraints are being overcome only in organizations where a sustained and concentrated effort is being made to do so.

2.15 Constraints to productive management exist in any large, complex organization. However, public service executives we interviewed identified three constraints that in the public service particularly deflect attention from productive management. They are:

- the impact of political priorities on the achievement of productive management;
- the many administrative and procedural constraints with which management is burdened; and
- the few incentives, but many disincentives, which influence productive management.

2.16 The first of these constraints is unlike the other two. Many public service managers pointed out that the purpose of the political process is to pursue political priorities and that, inevitably, efficiency considerations are not given the same priority in government as in the private sector. They also noted that it is the public servants' responsibility to implement public policies as defined by the political process. Therefore, such priorities cannot be viewed as constraints. They are part of the essential *raison d'être* of public service management. On the other hand, many executives argued that the political process can inadvertently help to establish significant constraints to productive management. They further argued that these constraints have to be recognized in any complete analysis of the problems and difficulties of pursuing economy, efficiency and effectiveness in the public service. Accordingly, the impact of political priorities on public service management is included in our discussion.

Political Priorities Have a Major Impact on Productive Management

2.17 The consensus of public service executives we interviewed is that political priorities have a significant impact on productive management. The political process has concerns that tend to overshadow and, to some extent, displace productive management. An important concern of the political process is to gain public support, and such support is principally achieved through the announcement of policy initiatives and new programs. Politicians rarely get elected for concentrating on productive management of departmental operations. "There are no votes in good management. Five ministers told me that", is how a senior official in a Canadian province expressed it to us.

2.18 This phenomenon is not limited to Canada. A United States Cabinet Secretary, responsible for administering a department of 120,000 people, said during an interview:

You learn very quickly that you do not go down in history as a good or bad Secretary in terms of how well you run the place – whether you're a good administrator or not. As a result, a Secretary often tends to ignore administrative things because it is not worth his time; it's not where he should put his emphasis.

2.19 **The political process has political priorities.** The political process is concerned with public policy issues far broader than operational efficiency. It sees national priorities as part of value for money. The federal decentralization program is an example. Measured strictly in terms of departmental operating costs, transferring an operation to a regional location might be more expensive than maintaining it centrally. Yet, in terms of regional development, national unity or employment creation, such a move may be highly effective.

2.20 At the same time, the political process seeks a public service that meets publicly demanded standards of prudence and probity, a service that is representative, responsive and equitable. To ensure that, and to prevent waste and extravagance, a body of regulations is set up. These regulations are, however, predominantly of a preventive nature. Their effect is more to check undesirable practices than to nurture desirable ones, more to

inhibit than to encourage. Thus, their effect on the management process is to impose an unintended burden.

2.21 We do not of course question the political process. We are simply noting that the political process is by nature "political", and that its priorities have a significant impact on the public service management process. This impact is one of the basic differences between public and private sector management and has to be remembered when making comparisons between public and private sector organizations. Private sector firms are not required, to the same extent as the public sector, to reconcile questions of productive management with concerns such as national unity, regional development and national well-being. On the other hand, attempts to improve value for money in the public service should not be abandoned just because politics and public administration are not easily separated. To minimize the dilemma, constant and deliberate balancing efforts are required.

2.22 **Good government is not necessarily good management.** In the public service, good government is not necessarily seen by the majority of executives as the same as good management. The staffing process is often given as an example. As part of good government, more and more requirements are seen as being added to the staffing process to ensure the public service is accessible, equitable and representative. These, and other causes, make the staffing process such that it is now seen by managers as a considerable constraint to productive management.

2.23 Well performing private organizations focus on a few key objectives, maintain clear lines of accountability, give managers ample authority and emphasize management skills. Governments, on the other hand, must satisfy many conflicting interests. In attempting to do so, they inadvertently foster in the public service an environment of multiple objectives, unclear lines of accountability, excessive controls on managerial authority and significant emphasis on policy advice rather than management skills.

2.24 Many successful private organizations are led by chief executives who have been part of the organization for many years and know its business intimately. In most government departments, on the other hand, deputy ministers are rotated frequently, making it difficult for them to acquire first-hand knowledge of the issues about which they are expected to make major administrative decisions or give policy advice.

2.25 While good government and good management are not necessarily seen by public service executives to be synonymous, they are not necessarily incompatible. But they are difficult to reconcile. Based on our observations in Canada and elsewhere, it takes constant effort to balance the demands of the political process and the necessities of productive management. If such effort is not made, political concerns can unduly displace management concerns and become constraints to productive management.

2.26 **Government operates in a fish bowl.** Public service executives recognize that activities in government are much more a subject for public discussion than similar

activities in business. Consequently, even small and isolated instances of abuse become the focus of public attention. For example, the misuse of travel funds or instances of seemingly unfair contract awards can become the subject of questions in Parliament with attempts to embarrass the Government. The need to minimize even the appearance of not observing prudence and probity can become more important than value-for-money considerations.

2.27 The political environment has a major impact on management. During our study, public service executives pointed out that departmental proposals to reduce operating costs are sometimes not compatible with political priorities. Such proposals typically suggest more economical arrangements with respect to passenger railway services, defence establishments, Customs ports, navigation aids and others. Affected parties tend to view such changes as a reduction in government services rather than an improvement in government productivity.

2.28 This situation appears to create perplexing dilemmas for public service managers. On one hand, they are urged to minimize costs. On the other, their initiatives to achieve that objective are not acceptable. Managers soon realize that there is more encouragement for program expansion than for program cut-backs and that productivity concerns tend to fade away when confronted by political priorities.

2.29 Public service managers find they are not likely to be judged by their efforts to use resources as productively as possible. Rather, they are likely to be judged by public charges of extravagance or inequitable treatment and the embarrassment this causes. They therefore focus more on how a result is achieved than on the result itself, more on the legitimacy of the means than on the end, more on process than on product. The resulting administration tends to prevent embarrassments more than it tends to encourage performance for productivity.

2.30 The majority of executives we interviewed both in Canada and elsewhere said the political process provides only limited encouragement for productive management (see Exhibit 2.1). In the instances where we did find managers generally concerned with value for money, there was invariably some corresponding encouragement from the political process. In the State of Bavaria, for example, a Commission for Simplifying Government Administration was set up in 1978, reporting direct to the Premier. Its task is to recommend measures for making government administration simpler, quicker and more cost-effective. The conclusion seems evident: for greater value for money in the public service, the political process should provide deliberate and sustained encouragement of productive management.

2.31 By encouragement of productive management, we mean deliberate and persistent efforts on the part of Parliament, Government and Cabinet to balance political priorities with value-for-money considerations. This includes a strong commitment to consider greater economies and efficiencies in government programs and in their deliveries. It also includes a willingness to review the constraining implications of administrative procedures that are set up to regulate the public service. It finally includes an expressed policy that managers at all levels are expected to come forward with proposals to achieve

The Political Process and Management

Excerpts from Interviews with Public Service Executives

Political priorities

"I suspect that many politicians are really not too interested in the bottom line in terms of actual cost-benefit. Because often in politics it's not what is done but the fact that something is done. It has really not much to do with efficiency. It has to do with power."

"What counts for parliamentarians...for politicians is...the announcement of a new program. These announcements are what the Minister is recognized for. No one is really interested to know if the program is efficient or effective."

"The real problem has to do with the iron triangle...between politicians, bureaucrats and the public. It is basically a political process where each of the three parties acts in concert with the other two in order to sustain funding and never reduce or eliminate a government program."

Good government vs good management

"Government does not exist to operate on a good management basis, it exists to give goods and services to people and there is not necessarily a relationship."

"The government must be seen to be fair. The fact that our staffing system can be proven as being grossly inefficient – that may be a perfectly acceptable cost in order to be seen to be fair. So anybody coming and saying, my God, it's taken six months to staff a position: that's the price you pay for being government."

Government operates in a fish bowl

"Last week the public would be infuriated about first class travel. So this week we do away with first class travel. Next week, the public is infuriated about something else, so we do away with something else. So in time, we do away even with our training program. But note this has nothing to do with cost-effectiveness."

The political environment has a major impact on management

"The government is a massive, complex, logistically terribly difficult operation. So, you take the biggest and most difficult operation, you put it into a socio-political environment which could not be deliberately made worse from the standpoint of managerial effectiveness, you add a mixture of adversarial relationships and resentments, and then you wonder why some cost accounting system doesn't result in any lasting benefit."

greater value for money, as well as public recognition of outstanding examples of productive management.

Management Feels Unduly Constrained by Administrative Procedures and Conflicting Accountability Requirements

2.32 The second significant constraint to achieving more productive management, according to the managers interviewed, is the body of administrative regulations and the conflicting accountability requirements that limit managerial authority and autonomy. The majority of public service executives we interviewed indicated they would be able to manage more productively if there were fewer and less detailed regulations. They insisted that many regulations entail extra staff, which adds to the cost of government. They also noted, however, that there are considerable differences in the ability and willingness of managers to deal effectively with constraints.

2.33 A smaller proportion of executives we interviewed believed that regulations are not excessive but inevitable, to prevent weak managers from acting irresponsibly. They argued that measuring results is difficult because managers often do not have clear-cut performance objectives and that, therefore, the management process itself must be tightly regulated.

2.34 Other surveys done in the public service tend to confirm the view that the present body of regulations is a serious burden on managers. The Burns Committee on Executive Compensation, a group of private sector executives who advise government on public executives' pay, stated the following in their 1982 Report:

The effective discharge of management responsibilities depends very much on the total climate within which managers must function. One wonders if managers can get on with their essential role, which is to manage the effective and efficient delivery of services to citizens through their employees, if their flexibility to manage is restricted and if the myriad of complex government procedures and regulations is not modified to reflect the practical aspects of delivery of services. The Advisory Group feels that some co-ordinated thought should be given to the environment within which managers direct programs and staff.

2.35 We are aware that there is always a certain level of complaining going on in any large organization. Yet, the extent and intensity of the frustration we encountered was striking. If a large proportion of executives in the public service perceives that they don't have sufficient authority and autonomy to manage as well as they might, then this perception itself is a significant constraint to productive management.

2.36 **Managers' authority is constrained.** Executives we interviewed pointed out that the burden of regulations is particularly constraining in the following areas: the authority to select and hire staff; the flexibility to develop practices uniquely suited to local

conditions; and the discretion to choose an optimum mix of resources for maximum productivity.

2.37 Exhibit 2.2 lists the top ten constraints as executives say they experience them. Each of these constraints by itself is not seen as a major problem, with the possible exception of staffing. But when constraints become a spider's web of rules, regulations, directives, prohibitions and controls, managers lose sight of value-for-money concerns.

2.38 Of all the constraints mentioned by public service executives, staffing problems were viewed as the most persistent and frustrating. According to the majority of executives we interviewed, the number of months it takes to staff a position is seen as an unreasonable length of time, in view of pressing operational requirements.

2.39 Public service executives were of the opinion that the burden of detailed, government-wide regulations is one of the reasons why Crown corporations are increasingly chosen to perform government activities. Executives pointed out that Crown corporations have greater flexibility than departments when dealing with issues such as staffing, contracting, purchasing and capital projects. Crown corporations can therefore design their administrative procedures to meet the specific requirements of their operations. Public service executives argued that, if departments had the same type of flexibility, management in departments would be more productive.

2.40 **Managers are faced with conflicting demands.** Managers see themselves hampered in delivering satisfactory program results at reasonable cost by conflicting expectations of central agencies, departmental staff groups, service departments and review bodies.

2.41 Treasury Board determines how departments budget, classify positions and organize functions. The Public Service Commission prescribes how managers will hire and promote staff. The Comptroller General sets guidelines for internal audit and evaluation. The Department of Supply and Services establishes procedures for making purchases. Public Works has responsibility for the acquisition and maintenance of accommodation. Departmental staff groups tell the manager how to plan, deal with personnel, administer regulations, keep accounts, measure performance. Audit groups check for weaknesses and make recommendations for change. Each of these groups has some authority to prescribe how managers should act, yet assumes little or no responsibility for the results of managers' actions, should they turn out to be unsatisfactory because of conflicting demands.

2.42 The problem of unclear authority and accountability relationships was examined by the Royal Commission on Financial Management and Accountability in 1979. Its report suggested that "the authority of deputies with respect to administration be clearly prescribed and that they be held accountable for that administration."

Top Ten Constraints**(In Alphabetical Order)****As Reported by Public Service Executives Interviewed**

Administrative regulations: Rules are too many, too detailed and too universal. They do not provide flexibility for departments to achieve value for money in specific circumstances.

Budgeting constraints: Funds that are authorized but are not spent by the end of a fiscal year cause problems for departments with large capital projects because of the "lapsing" requirement.

Classification: It is difficult and time consuming to get positions classified because of the many detailed requirements of the classification process.

Contracting rules: Contracting rules limit managers' flexibility in using contract staff for short term projects or for starting up programs.

Information reporting requirements: Central agency and departmental requirements for information take up considerable management time and are expensive.

Organizational change problems: Many organizational changes are seen to be costly, demoralizing and unproductive.

PEMS (Policy and Expenditure Management System): The policy development process is complex and time consuming. Excessive paperwork is required.

Personnel rules: Transferring, dismissing, disciplining or demoting staff is a difficult, time-consuming process.

Role of service agencies: Service agencies appear to create unnecessary costs and time delays.

Staffing: The staffing process is complex, time-consuming, frustrating and costly.

2.43 Most executives we interviewed noted that only limited progress has been made since then. Considerable uncertainty remains as to what authority deputy ministers have and to whom and for what they are accountable. Exhibit 2.3 illustrates accountability relationships between departmental management and other organizations.

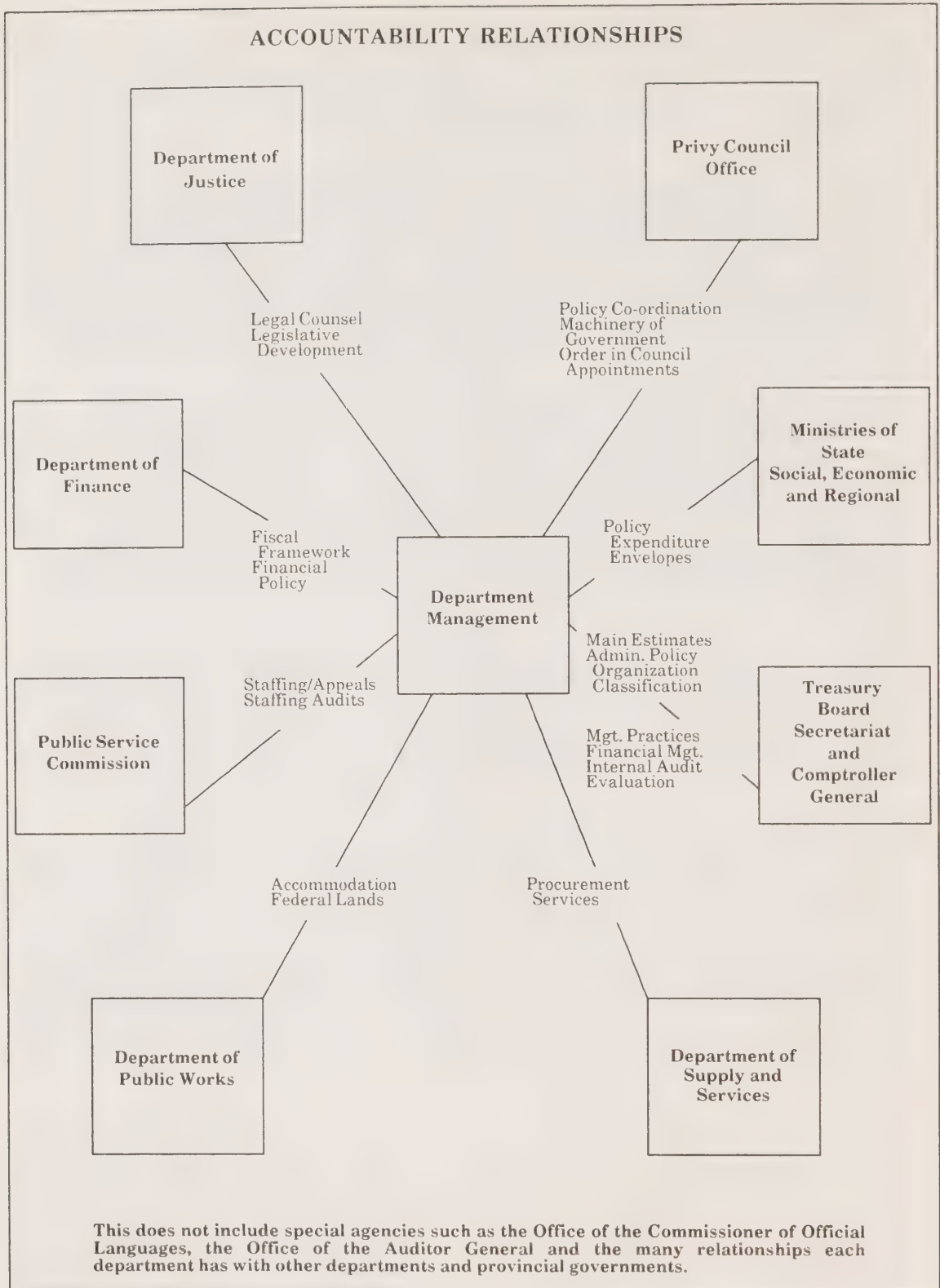
2.44 **Case studies show that conflicting accountability requirements can create significant problems.** The problem of conflicting demands was described to us during interviews with executives. To provide some illustration of actual occurrences, we conducted a number of case studies. Individual summaries of three cases are included as part of this chapter. These cases are not necessarily typical of management situations in the public service. They are nevertheless actual occurrences and illustrate that much time and efforts are sometimes necessary to overcome conflicting accountability requirements.

2.45 **Case 1** in Exhibit 2.4 shows how four departments required nearly two years to agree which of them should assume the chairmanship of an interdepartmental committee. Each of the departments had demands it felt obliged to maintain. A common review mechanism to resolve the issue did not exist. It took a Cabinet-authorized withholding of already approved funds to get the departments to reach a consensus. The case is noteworthy because of the important task of the committee: controlling activities related to the use and disposal of highly toxic chemicals.

2.46 **Case 2** in Exhibit 2.5 describes how difficult it can be to change the classification of positions. A department felt it had to request such a reclassification to maintain effective services. The reviewing central agency, on the other hand, felt it had to reject the request because of concerns over the proliferation of special staff groups in government. It took six years to resolve the problem.

2.47 **Case 3** in Exhibit 2.6 is the summary of a dispute that focused on overlapping mandates of two departments. A department had printed maps for nearly 100 years, but was questioned by a central service department whose mandate included the provision of printing services. The dispute went on for seven years and, according to one study, resulted in unnecessary costs of over \$900,000. The case illustrates how difficult it can be to achieve productivity improvements when departmental mandates conflict and the means to achieve objectives are disputed. The Department of Supply and Services has indicated that it has changed its approach so as to more clearly separate service and control functions. This according to DSS will help avoid the problems that emerged in this case.

2.48 In addition to these three cases, we studied the impact of government-wide regulations on the management of two high priority projects: the establishment of the National Energy Program in the Department of Energy, Mines and Resources, and the Telidon project in the Department of Communications. As Chapter 9 on Energy, Mines and Resources in this Report shows, significant problems were encountered in hiring the necessary people for a rapidly expanding program, despite flexibility and support on the part of central agencies. In the case of Telidon, some of the traditional administrative procedures



CASE 1 – Reconciling Conflicting Priorities: Controlling Toxic Chemicals

Toxic chemicals can benefit agriculture, but can also endanger human health. There are 58 Acts of Parliament governing the use of toxic chemicals, and 24 federal departments and agencies are engaged in toxic-chemical-related activities. Four departments account for the bulk of these activities: Agriculture, Environment, Fisheries and Oceans, and Health and Welfare.

In 1981, Treasury Board became concerned that the existing framework for controlling toxic chemicals had become unsatisfactory. Accordingly, it encouraged the four key departments to form a committee that would co-ordinate new resources for toxic chemicals programs.

Treasury Board was not convinced that the four departments placed a high priority on co-ordinating their activities. As a response, Treasury Board obtained permission from Cabinet to withhold already approved funds for toxic-chemical-related activities until the four departments submitted an action plan.

By October 1982, the four departments had developed terms of reference for the Committee, but could not agree on who would chair it. Each department was concerned about its own priorities if another department, as Chair, could direct planning and funding.

The issue was finally resolved in May 1983, when the Department of Environment was assigned the chairmanship for the first three years. It had taken nearly two years to resolve the issue of chairmanship for a committee that would guide the use and disposal of huge quantities of highly toxic substances.

CASE 2 – Reconciling Conflicting Demands: Reclassifying Positions

In 1976, Labour Canada found it was no longer able to attract and retain labour conciliation officers because of an inadequate compensation plan. The Department saw this as a danger to the effectiveness of its mediation and conciliation service. It therefore proposed to Treasury Board to reclassifying conciliation and mediation officers from the Program Management into the Personnel category, which offered broader salary ranges and included performance pay.

Treasury Board was not convinced that the problem was one of inadequate pay. Elsewhere, a number of such difficulties in pay structure had, in the past, proved to be temporary. Also, approving the request would have set a precedent for other groups to make similar demands. Finally, establishment of the Senior Management group was pending, which would in any case affect several categories. In Treasury Board's view, Labour's problem was primarily one of organization. The request for reclassification was therefore denied.

This conflict between the conflicting demands of the Department and those of Treasury Board led to a long process of consultation, punctuated by frustrations and frayed tempers.

After four years of negotiations, the Deputy Minister of Labour and the Secretary of the Treasury Board became involved personally to break the impasse. Treasury Board officials now agreed that action was required. They authorized the establishment of a new classification subgroup within the Program Management group. Such subgroups are normally contrary to the Board's policy of trying to keep the number of groups and classifications in the public service to a minimum. An exception is considered only when the need is strong and the petitioner persistent.

Once agreement had been reached on the basic solution, it took another two years to establish the subgroup and the associated compensation plans. The actual effect on salary costs was, however, surprisingly small: only an additional \$150 per year for each of 23 employees, or a total of \$3,400. Yet, the elapsed time from the original proposal to implementation was six years.

CASE 3 – Reconciling Conflicting Mandates: Purchasing a Printing Press

The Surveys and Mapping Branch of the Department of Energy, Mines and Resources has produced maps of Canada for nearly 100 years. In 1975, the Branch noted escalating operating costs due to frequent breakdown of its obsolete printing presses. The Branch requisitioned a modern printing press through the Department of Supply and Services. DSS advised that three issues needed to be resolved prior to procurement: DSS's own mandate to provide printing services seemed to conflict with the printing activity at EMR; the EMR printing work might more economically be contracted out; it might be advisable to consolidate the DSS and EMR printing activities.

Agreement could not be reached, and both departments marshalled opinions in support of their respective views in a lengthy dispute that involved a succession of ministers and senior officials on both sides. The only point on which both parties agreed was that an additional printing capacity was required.

After nearly four years of dispute, EMR prepared a Treasury Board submission to seek approval for the acquisition. Treasury Board Secretariat concluded, however, that it was not the Treasury Board's role to arbitrate such disputes. It urged the two departments to reconcile their differences on their own.

The controversy was not resolved until January 1983, when the Minister for Mines insisted on making a submission to Treasury Board. The Board decided that EMR should get its new printing press.

The elapsed time from original requisition to final approval was seven years. During all this period, the dispute had focused mainly on the mandate question – on who had the right to print maps. According to one study, EMR could have saved over \$900,000 in operating costs, had it been able to install a new press at the time of the original requisition.

did not match the need of the fast-moving, high-technology-oriented organization that had to cope with fierce international competition under intense time pressure.

2.49 Similar indications emerged from interviews with regional managers who operate programs that provide direct services to the public. These managers are expected to be responsible – satisfy public service-wide administrative processes. Yet, they are also expected to be responsive – satisfy the needs of diverse client groups. These requirements often conflict and are difficult to reconcile. As a result, the quality of service delivery can suffer.

2.50 The cases, and other examples, illustrate that conflicting accountability requirements can cause unproductive levels of frustration, dispute and inaction. They suggest that, to create favourable conditions for productive management, mandates and administrative procedures should, to the extent possible, be designed to fit specific requirements of programs. The examples also illustrate, however, that resolution of difficulties, as well as achievement of productive management generally, depend significantly on the competence and motivation of managers. Administrative mechanisms will virtually always be imperfect to some degree. Managers must therefore compensate for such deficiencies by ensuring appropriate interpretation and application. Indeed, to the extent that managers can be counted on to do this, administrative procedures could be fewer and more flexible.

2.51 **Productive management depends on managers.** Productive management is not likely to be brought about by control systems, regulations and standards. These can, at best, help to prevent outright "bad" management. Productive management results to a large degree from the initiative of competent managers. Exhibit 2.7 gives some views of executives on this point.

2.52 We noted during our study that there are some managers who achieve program objectives and, at the same time, give satisfactory attention to economy and efficiency. They typically have an understanding of central agency operations, a solid knowledge of the department and a willingness to negotiate with staff groups and central agencies about adjusting constraints to suit operational needs.

2.53 In contrast, we noted that some senior managers show little appreciation of operational and managerial issues. They are reluctant to negotiate with central agencies about adjusting constraints or to direct staff groups to develop practices for specific requirements. This aggravates the problem of constraints.

2.54 On the whole, we noted that few managers, despite a general readiness to express dismay over constraints, have made serious efforts to assess the true impact of constraints, to explore ways to overcome their adverse effects or to indicate effective alternatives. Examples of the more successful managers suggest that other managers – at all levels – should be able to develop knowledge and skills to deal with constraints more

Management Authority and Accountability in the Public Service

Excerpts from Interviews with Public Service Executives

Managers have too many constraints on their authority

"At present, there are too many rules in various areas such as personnel, finance, and administration. You can prove they reduce costs, but the loss in terms of productivity is so much greater."

"There are the rules of the Public Service Commission, there are the rules of the Comptroller General, the Treasury Board and the semi-central agencies. As a result, an individual even at a high managerial level is caught in a system that doesn't allow him to exercise much initiative. As a result, accountability is limited."

Managers have many bosses and accountability demands

"When you are getting your guidance as to what you are supposed to do, you get it from the Privy Council Office, from the Treasury Board Secretariat, from the Public Service Commission, from Cabinet and from your Minister. There is no coherence in direction. In fact, there is just more conflict and, finally, there are no criteria that you can use to make the judgement."

Productive management depends on managers

"Everybody who is in a position to influence management in government does it by preaching better processes and not better results. So, you have public servants whose only merit is to comply with processes."

"If you don't have the authority or the resources, obviously you can't be expected to perform. As the number of regulations have gone up, they are providing more and more defences for the inefficient managers."

"And my view is that if you have good managers you will have to let them manage and take some risks."

"It depends on the deputy, you know. If he needs to be in the good book of the Treasury Board, he will set up and support strong internal staff groups not only to satisfy, but to exceed central regulations."

positively than they do now. This may be particularly true of personnel processes, to which managers have traditionally given less emphasis than is required.

2.55 One of the reasons why there appears to be so little effort to deal positively with regulations and other constraints seems to be the limited appreciation many managers have of each other's responsibilities and problems. During our interviews, we noted surprising gaps of understanding between departments and central agencies, headquarters and regions, senior and middle managers, and line managers and staff specialists. This situation promotes a "nobody will help me" syndrome that results in complaints rather than in positive action to deal with administrative constraints.

2.56 Our interviews revealed some instances where deputy ministers or other senior managers had made considerable efforts to overcome these problems of communications. They reviewed the impact of constraints on operations. They caused staff groups and service agencies to be sensitive to operational needs. They were successful in bringing about an appreciation between headquarters and field managers. As a result, the entire management team had an *esprit de corps* that allowed them to co-operate productively in the resolution of operational problems. These examples show that productive management depends to a large degree on concerted efforts by individual managers who receive strong corporate leadership and support.

There Are Few Incentives for Productive Management, but Many Disincentives

2.57 The third significant constraint, according to the public service managers interviewed, is the lack of incentives and the number of disincentives which influence productive management in the public service. In private sector organizations, the need to produce goods and services the public will buy but still be efficient enough to make a profit is the ultimate incentive to be cost-effective. In the public service, this "bottom line" does not exist, despite attempts to use program evaluation as a bottom-line substitute. Consequently, the basic attitudes that lead to continual attempts at improving productivity are scarce.

2.58 Incentives. Interviewees indicated that innovative and productive management in the public service is not generally due to effective incentives. Rather, it results from exceptionally motivated managers. Such individuals take pride in doing things to a standard of excellence and act on the personal conviction that achieving value for money is an important aspect of their managerial function. Incentives are usually seen in terms of direct extra compensation for outstanding achievements, including performance pay and bonuses. And research confirms that monetary incentives do have an important role to play. But incentives and rewards could also take the form of extra pension credits, sabbaticals, educational assignments, particularly interesting projects, greater job autonomy, especially attractive working environments, or recognition through some sort of public award for high achievers. At present, the public service provides few incentives to encourage its managers to strive for greater value for money.

2.59 Disincentives. During our study, interviewees noted a number of disincentives that tend to work against productive management: the lower level of prestige associated with managing operations compared with giving policy advice; the higher risk of causing public embarrassment – and being penalized – as a line manager compared with being a staff specialist; the expectation of having to reconcile conflicting demands that exceed the manager's authority; the requirement to reduce resources when funds seem to be wasted elsewhere; absence of recognition and reward for productive management. Exhibit 2.8 gives a representative sample of direct quotations from interviews.

2.60 Executives also mentioned a number of disincentives they thought could be changed to minimize negative consequences:

- Person-year controls can be a disincentive to keeping down salary costs, since a person earning \$45,000 counts no more than one earning \$15,000. A total salary budget would be more satisfactory because it would encourage local managers to put together an optimum mix of resources for particular situations.
- There is some stigma attached to "lapsing" funds at the end of a fiscal year, because this may be taken as an indication of a manager's inability to budget properly, and could reduce budget levels in future years. This is a disincentive to "return" non-essential funds and an incentive to spend them, whether value for money is obtained or not.
- Across-the-board budget cuts are imposed equally on cost-conscious managers and those with "padding" in their budget. This discourages managers from running a lean operation.
- Factors affecting managerial job grades comprise size of budget (including salary budget), impact of decisions and similar measures. This represents a disincentive for managers to economize and to keep operations small.
- The difficulty of removing unsatisfactory staff is a disincentive to resolving performance problems. It is, on the other hand, an incentive for hiring additional staff to compensate for existing inadequacies.
- Government-wide administrative regulations for such things as travel, contracting and acquisition of supplies can create inefficiencies for individual departments. The time and effort needed to request exceptions is a disincentive for managers to do something about the additional costs such regulations can cause.

2.61 Though there is criticism of disincentives to productive management, senior executives are aware that these arrangements were not designed to frustrate managers. They are simply part of the management process in large, complex organizations. Nevertheless, these disincentives have a significant impact on productive management.

Incentives and Disincentives to Productive Management

Excerpts from Interviews with Public Service Executives

Disincentives to value for money

"Throughout the public service, the experience of the efficient and effective manager is that he is being penalized. The very fact that he has good plans and good measurement systems and evaluation systems means that information will be used by central agencies and other critics to mount a strong criticism of his performance."

"There is no reward or even recognition for least cost management or for value-for-money management because any moneys or any funds that are being saved must be returned to source. The good manager is affected by cut-backs just as much as the inefficient manager."

"Rather than encourage the manager to become good, we prevent him from becoming bad."

Motivation

"On the basis of my casting around, I can find no incentive for the manager to be efficient. I can find lots on the other side, I can find many incentives leading the manager in the public service not to be efficient."

"The effect on motivation is severe. People either give up in disgust or become completely cynical. A common reaction is, 'Why should I stick around? It's four o'clock. I'm going home'."

"I wouldn't bet my career advancement on the fact that I was the most efficient guy in town. In my experience, if the deputy asks managers about efficiency, it is important. If the deputy doesn't, it's not important. I personally don't think that message has yet come across."

Management is not a high priority

"I am asked to give a lecture on the roles of the Deputy Minister, and to me there are three roles: there is the policy advice and the ministerial assistance role. There's the representational role. The management role is running the Department - looking after the whole mandate. That to me is the most demanding, it's the most difficult, it takes most of the DM's time, and yet within the public service, it's the one that's given the least recognition."

2.62 The impact of disincentives. The virtual absence of incentives, combined with numerous disincentives, appears to discourage productive management. In the beginning, managers do not feel encouraged to improve value for money, even where they see the possibility to do so. In the end, they may lose sight of even the possibility and the need to improve value for money. When there is public criticism about inefficiencies in the public service, they tend to react cynically. Interviewees remarked that those who care deeply about value for money feel it an injustice to be criticized when disincentives virtually encourage them to manage less productivity than they feel they could and that, as a result, their motivation and morale decline.

2.63 Another impact of disincentives is felt to be their disposition to breed controls. To the extent that disincentives cause managers to give less attention to value for money than they should, controls are established to counteract that inclination. But such controls can, in themselves, counteract productive management. For example, person-year controls enable government to limit the number of employees in departments. Yet, as the managers interviewed pointed out, they do not prevent the resulting tendencies to use as highly-paid staff as possible or to use contract staff to supplement employees. To limit these tendencies, still more controls are necessary. Disincentives and more controls appear to feed on each other, and both detract from achieving value for money. In the view of public service executives, controls could be fewer, yet more effective, if disincentives were reduced or eliminated and appropriate incentives instituted.

How Organizations Have Attempted to Improve Productive Management

2.64 As part of our study, we reviewed efforts to improve management in the Canadian public service and in the public services of the Province of Ontario, the Federal Republic of Germany, the United States, the United Kingdom and Australia. We also reviewed management practices in a number of private sector corporations in Canada and the United States.

Improvements in the Public Service of Canada

2.65 Over the years, there have been many efforts to improve management in the public service in response to changed social objectives, more programs and greater expenditures. During the past five years, special efforts have been made to improve accountability and management practices. For example:

- departments have established better internal audit and evaluation capabilities;
- the Office of the Comptroller General was created, and it has launched IMPAC, a project to improve management practices and controls;
- the Government has introduced the Policy and Expenditures Management System to better link policy and resource allocation decisions; and

Treasury Board has announced the publication of "Principles for the Management of the Public Service."

2.66 These initiatives have attempted to improve management systems and information as well as increase the capability to monitor and control departmental activities and expenditures.

2.67 Not surprisingly, such initiatives can also create problems. Public service managers reported experiencing more compliance demands, increased reporting requirements, additional accountability relationships and, of course, more paperwork. At the same time, many of the disincentives that detract from productive management remain in place.

2.68 Central agencies indicated that they are gradually attempting to reduce management constraints. Treasury Board reports that, through its deregulation project, it has eliminated a number of regulations and that, where feasible, it issues general guidelines instead of specific rules. It indicates it has introduced department-specific threshold limits in areas such as capital spending, requiring departments to seek formal approval only when they intend to exceed their threshold. In areas such as bilingualism and equal opportunities, Treasury Board states it has reduced reporting requirements by monitoring progress selectively through outputs generated by departmental information systems.

2.69 In the personnel area, the Public Service Commission reports it has made efforts to streamline the staffing process through deregulation and the continuous review of staffing procedures. The Commission states it is also experimenting with a new framework for delegation of staffing authority to take into account departmental circumstances. A pilot project for establishing custom-made arrangements to meet specific staffing needs is in progress in the Department of Public Works. The Commission noted that it has taken initiatives to increase the responsibility of line managers in the staffing process. The Commission explained that, together with Treasury Board, it has redesigned training programs for senior executives and managers to develop managerial skills and knowledge of the structure of government. Finally, with the establishment of the Senior Management category, departmental corporate management has been given more flexibility in allocating senior personnel.

2.70 Recent guidelines with respect to the Policy and Expenditure Management System established a review process in which the Treasury Board Secretariat and the Comptroller General's Office, together with individual departments, review operational plan frameworks. This may help ensure that operational plans are considered in the light of desired results and other known requirements. It may also improve central co-ordination and help departments define their requests for resources.

Other Public Services

2.71 During our review of improvement efforts in the United States, the United Kingdom and Australia, we noted that these countries have problems similar to Canada's with respect to public service management. Government Commissions set up by these countries have consistently commented on problems such as unclear objectives, inadequate performance measures, divided accountability, limited emphasis on management development and insufficient concern for economy and efficiency. Attempts to deal with these problems have met with mixed success.

2.72 The United States government passed a Civil Service Reform Act to establish incentives for managerial performance and improve management accountability. It also established an Office of Productivity and a Presidential Management Council to support efforts at improving management practices, identifying opportunities for productivity improvement and disseminating innovations throughout the government. In addition, the United States government has now established a project to review the impact of government regulations on management.

2.73 The United Kingdom set up the "Scrutiny Program" which is headed by the Prime Minister's Adviser on Efficiency in Government. This program requires departments to undertake thorough examinations of their activities to identify areas for potential savings and staff reductions.

2.74 In the Province of Ontario, senior officials explained to us how a concerted effort at simplification has resulted in fewer central controls and more departmental autonomy. The province published a statement of "Principles and Standards of Management" which outlines how public servants are expected to manage. A noteworthy innovation is "The Deputy Ministers' 100 Minutes". Under this mechanism, Ontario's Management Board of Cabinet – which comprises eight ministers – sets aside 100 minutes each year for each deputy minister to discuss departmental achievements, problems and priorities.

2.75 In the Federal Republic of Germany, individual states have set up Commissions for the Simplification of Administration. In the Ministry of Culture and Sports for Baden-Wurttemberg, the work of the local Commission focuses on deregulating the administration of schools, colleges and universities. The Ministry employs 120,000 teachers and other public servants and used to manage its affairs with the help of 3,500 administrative directives. As a result of an effort at deregulation, this number has been reduced to 365. The principal aim of the effort was to increase autonomy of managers, encourage delegation of authority to the lowest practical level and unify formerly divided lines of accountability.

2.76 We interviewed some of the managers and they stated that the purging of regulations has had the hoped-for effect. We also noted, however, that some managers are uncomfortable with their new-found freedom. They can no longer "hide" behind regulations,

but must make decisions and take actions they sometimes find uncomfortable. When we discussed this with ministry officials, they showed themselves aware of the problem. They indicated that training and counselling assistance would be made available and that managers who are unable to perform their duties might be asked to change to non-managerial positions.

2.77 To obtain the perspective of a reviewer of this process, we interviewed senior officials in the Office of the State Auditor General. They generally supported the trend toward deregulation because it promises to reduce duplication, delays and unnecessary administration, thereby increasing productivity. We noted some uneasiness, though. Since only few regulations remain in force, auditors can no longer do the bulk of their audit work by verifying compliance with regulations. Instead, to give an opinion on management's performance, they must develop some methodology to evaluate performance based on the quality of judgement managers display in particular situations.

2.78 Our review indicates that, while problems in different public services are largely the same, approaches to solve them vary considerably. The common thread in all approaches is, however, the recognition that significant and sustained efforts are necessary to reduce constraints experienced by managers and to increase incentives and support for productive management.

Private Sector Organizations

2.79 Interviews with private sector executives indicated that successful corporations tend to have lean, performance-oriented administrative systems with clear accountability and responsibility assignments. Private sector executives kept emphasizing to us how crucial they consider it to be to focus on a few key objectives and results and to rely extensively on the judgement of experienced, committed managers rather than on detailed, prescriptive regulations. Following are some of the comments executives made to us:

We have a deliberately small corporate structure, so that we don't let the centre get so big that it overwhelms managers. The branches therefore have a lot of local discretion to make decisions. (Chief Executive of a manufacturing firm.)

My people feel they understand the mining industry and therefore are prepared to delegate authority downward because they can see if anything is going wrong. I think that this company prides itself on its lack of procedures. (Vice-president of a mining company.)

If you have a well-rounded group of people without too many rules but with a lot of experience and a lot of responsibility and a lot of authority, they can do a much better job of execution of the project at hand than a larger group with more structure. My number one job is to provide the environment for our managers to excel. (Chairman and Chief Executive Officer of a major Canadian resource company.)

2.80 Most private sector executives we interviewed insisted that excessive rules tend to hamper initiative, innovation and the exercising of management responsibility. This, in turn, detracts from productive management and its improvement. Executives also indicated to us that there is an enduring inclination – especially on the part of staff groups – to develop and disseminate rules for all sorts of situations. Successful firms, executives pointed out, constantly trim their bureaucracies, minimize detailed rules and reduce levels of hierarchy to maintain a productive management environment.

2.81 Many of the successful corporations are attempting to match the needs of the organization with the needs of employees. They conduct surveys to determine how employees perceive organizational climate and management practices, and they look for suggestions on how productive management can be improved. This information is then used in attempts to improve the quality of working life in the corporation. Improvement of productive management is seen to be highly dependant on the active support of people at all levels in the organization.

2.82 Finally, many of the private sector executives we interviewed emphasized that they, as chairmen or presidents of corporations, saw it as one of their main tasks to provide leadership, direction and encouragement for productivity improvement. Even in private sector firms with relatively clear goals and the bottom line as a natural incentive, a conscious and deliberate effort by organization leaders is required to improve management.

Conclusions and Suggestions

2.83 We are aware that we have no more than scratched the surface of a difficult and perplexing subject. Some of the difficulties we have discussed are closer to being dilemmas than problems, and management of the public service may never be able to solve them completely, but can only try to achieve the best possible balance between equally difficult alternatives. For example, in some cases an alleged constraint may arise out of the nature of government and can hardly be removed. In other cases, an alleged constraint may be used by some managers as an excuse. Still, the major constraints our interviewees identified do seem to have a significant impact on productive management in the public service. In this concluding section, we note trends in the growth of constraints, call attention to the perils of basing solutions on myths, and offer some suggestions for devising experimental approaches to achieving more productive management.

Conclusions

2.84 The aim of this study was to understand why problems with improving productive management persist in the public service. Our study results indicate that improvements to productive management are obstructed by significant constraints. These constraints tend to inhibit and ultimately sap the will of public service managers to emphasize economy, efficiency and effectiveness. Improvement of this situation will depend on the extent to which constraints are reduced and initiatives are taken to encourage and support productive management.

2.85 Constraints to productive management could increase in the next few years. There is a tendency in large, established organizations to follow a there-ought-to-be-a-rule approach when dealing with management problems. The public service is no exception. But in the public service the consequences of this approach are aggravated by the additional one-rule-fits-all effect. Managers of many diverse programs are expected to follow the same rules, regardless of need or fit. As the public service continues to become more complex through responding to new public needs, the number of regulations and their frequently non-fitting character can reach a point where productive management can be seriously jeopardized. At that point, the advantages of regulations can be outweighed by their disadvantages.

2.86 The public service may be close to reaching that point. It may have already reached it. A continuation of the trend to apply more rules to deal with greater complexity may make the situation worse.

2.87 Myths about the public service may lead to wrong solutions. During our study, we encountered various beliefs about public service management. Upon closer examination, quite a few of those beliefs turned out to be myths – either factually wrong or seriously misleading.

2.88 One example (see Exhibit 2.9) we encountered is the belief that the public service would be as efficient as successful business enterprises if only private sector management techniques were applied. There is consensus among scholars and practitioners of public administration alike that management techniques cannot be transplanted holus-bolus from one sector to the other and be expected to yield similar results. The Policy and Expenditure Management System (PEMS), for example, is a public sector development. It is not seen to be applicable in the private sector, and is therefore not used there. Another myth is that public sector management practices haven't been improved in many years. Our audit reports have noted that improvements have been made.

2.89 In addition to these myths, there are some misconceptions about the composition of the federal budget. It is often thought that the growth of the federal budget is due mainly to government operating costs, such as salaries for public servants, maintenance of facilities and purchases of equipment. In fact, operating costs represent about 25 per cent of the federal budget. This includes salaries and wages of all public servants, including National Defence. The other 75 per cent is made up of payments to provinces, individuals and Crown corporations, as well as payments to service the national debt. Over the past few years, the proportion of operating costs has been contained at the level of inflation. Although productivity improvements can reduce government operating costs, it must be recognized that even significant changes in operating costs have only a limited impact relative to total government expenditures. Nevertheless, in absolute terms, significant savings could be achieved through an improvement in productive management.

2.90 These myths and misconceptions tend to blur the understanding of management problems and can be misleading influences when devising approaches to

Myths About Public Service Management

Excerpts from Interviews with Public and Private Sector Executives, Discounting Myths About the Public Service

Myth:

The public sector would be more productive if only it brought in private sector techniques and private sector managers

"This constant mindless comparison between the public and the private sectors is really absurd. It does not even address the problem. Importing private sector techniques holus-bolus into the public sector is sheer nonsense. I think the individuals that I have run into in the public service are probably better than the people I have in place in my company. Whatever the problem is, I don't think it is the level of intelligence of the people nor even to a large degree their motivation."

Myth:

The public sector has failed to improve its management techniques

"Why have we been trying all these years and seem to have failed? What we have done is adapt private sector techniques to our own realities. Therefore, by definition, we have failed to implement them. I think the systems we have, which are a bastardization of private sector systems, are in fact pretty good."

"In 1972 you couldn't trust any number. You couldn't take any figure for granted. People have these views of the "good old days". Those good old days were terrible. I can pick up the phone now and find out practically any number I would ever need."

"I meet a lot of people from other countries. Quite frankly, most people I meet cannot believe we are that far advanced. In relation to other public services of the world, our PEMS system is simply years ahead."

Myth:

The problems of productive management can be solved by more control systems

"Systems cannot nullify the need for integrity and competence in managers. Systems and rules can always be manipulated, or they can be followed religiously to a point which brings the bureaucracy to a standstill."

improve value for money. In the past, there has at times been a tendency to focus primarily on controlling operating costs and on trying to apply private sector techniques as a way to improve management, without sufficient recognition that such measures may have considerable limitations in ensuring greater value for money in the public service environment.

2.91 The public service has made improvements in its management practices over the years. Yet, there is room for further progress. In trying to improve productive management in the public service, it must be recognized that myths sometimes lead to the wrong type of solutions. New approaches need to be devised that will establish a more positive and supportive environment for productive management.

2.92 In ending this section, we would like to summarize some of the salient points arising from our study. It was the consensus of the public service executives we interviewed that they would be able to manage more productively if the public service environment provided more active support for value-for-money concerns. The identified constraints make it difficult to improve productive management. They thereby contribute significantly to persistent management weaknesses in the public service.

2.93 It is apparent that parts of the identified constraints in the public service management environment arise out of the nature of government. Political priorities as well as a measure of administrative constraints will always be part of that environment. The types of disincentives that exist in the public sector are not unique to the federal government. They occur similarly in other public services and cannot easily be changed.

2.94 Public service executives will therefore to some extent always have to pursue productive management within the context of certain constraints. We believe there is considerable room for them to achieve such improvements through their own initiative. Unalterable constraints should not be used as excuses for avoiding responsibilities, nor for condoning poor management practices. We noted wide differences in the initiative of executives to manage productively. For example, some executives negotiate successfully with central agencies for special flexibility to fit their operational requirements. Other managers are more disposed to give way to their frustration by expressing dismay over constraints without trying actively to overcome them.

2.95 Public service managers could no doubt improve productive management within the context of present constraints. However, of those who have tried, some have given up in frustration because of disincentives. Our conclusion is that government could bring about substantial improvements through initiatives that recognize, review and modify disincentives and constraints to productive management in the public service. These initiatives should apply to all three: the ability of managers to deal with constraints, the willingness of the political process to provide greater encouragement for productive management, and the readiness of central agencies, service departments and staff groups to provide more flexibility and incentives to managers where the situation justifies it. The suggestions which follow have been developed based on that conclusion.

Suggestions

2.96 In concluding this chapter, we would like to offer some modest suggestions. They are designed to help overcome some of the problems identified and to find approaches that encourage more productive management in the public service. We are presenting suggestions rather than recommendations because this subject is so complex and ill-defined that definite recommendations would be presumptuous at this stage – if not misleading. Our suggestions have been distilled from the many ideas we received from public and private sector executives as well as from management researchers (see Exhibit 2.10).

2.97 There are several approaches we examined but rejected as not appropriate. For example, we do not believe the problems identified can be solved by "quick-fix" solutions, such as the introduction of new government-wide management techniques, or by major institutional reforms. The public service has had its share of both of these types of initiatives over the past years. We must look at other avenues for improvement.

2.98 We are not advocating a return to an unlimited "let the managers manage" philosophy or an indiscriminate reduction of regulations and controls. In the absence of incentives that exist in the private sector, central controls will continue to be necessary in the public service to achieve a satisfactory level of prudence, probity and equity. The challenge is to achieve a balance between the requirement for central control and the need for an adequate level of managerial authority so that managers can be responsible and accountable.

2.99 We recognize that the efforts of our Office to improve management practices may have contributed to the increase in regulations and controls in the public service. It will be necessary for our Office and for government to examine the costs as well as the benefits of additional regulations and controls and to consider their implications for productive management. Our Office will be reviewing the need for specific audits in some of the areas of administrative constraints that have been identified in this study. As well, we will be examining how the impact of disincentives to value-for-money concerns can be investigated more thoroughly in our future work.

2.100 Our suggestions are of a very general nature. They are designed to point out ways of thinking about the challenge of achieving economy, efficiency and effectiveness in the public service. We hope they will provide a focus for Parliament, Government, Cabinet and public servants to search for better ways of managing resources in the federal public service.

How Could Productive Management be Improved in the Public Service?

Excerpts from Interviews with Public Service Executives

Need for political support

"If you can get the politicians to recognize that efficient management will help them spend their money more effectively and help them get a better return for that investment then you bring a whole new dimension on the need for good management."

Requirement for a management philosophy

"You have to start with a management philosophy like Ontario's that includes things such as accountability, decentralization, freedom to act, standards of performance etc. It has to be adopted formally at the cabinet level and supported by political leaders. The philosophy communicates to management what they are expected to do and provides a basis for a common understanding between politicians and management of the general principles that should be achieved in managing government programs. For the first time, executives at all levels of the government would know what is expected of them."

Provide departments with more authority and make them accountable

"Deputies must be given more real authority over the administrative and financial aspects of their departments than they have now. But this authority must be such as to ensure that they will submit their stewardship to regular examination and audit. What is needed is a way in which the Deputy's performance can be looked at periodically on a regular basis in a sufficiently detailed and comprehensive fashion to permit a soundly-based appraisal of the Deputy's performance."

Simple custom-made management systems are the best

"Now the policies that emanate from central agencies should not be blindly applied and implemented without due regard for specific situations. I have repeatedly emphasized that it is necessary to customize and tailor-make policies for departments."

"Indeed our argument was that you pick the simplest system that will do the job – the simplest most adaptable structure. Keep it at that level so that you don't end up creating an organism that starts living a life of its own, because then ultimately it is discredited. I've seen MBO (management by objectives) working well and working poorly. They work well when they are not taken too seriously in some sense or when it is recognized that the essential thing in an MBO system is the communication that occurs – not the paperwork. And when the paperwork becomes an end in itself, it becomes counterproductive."

Review the costs of controls and constraints

"The benefits of regulations are said to be that they prevent waste and abuse. Yet, whatever they prevent may be outweighed by what they cost. There is the cost of making rules and the cost of administering them. There is also the cost of the resulting bureaucratic actions that are sometimes unresponsive and inflexible and even absurd. But the only things we ever hear about are the alleged benefits of constraints. No one knows their true costs. Someone should examine the constraints and make their full impact visible."

Increase positive incentives and support for management performance

"The Public Service Employment Act could be changed and so could the Financial Administration Act (FAA). There must be ways that you could change the FAA so as to encourage lapsing funds at the end of the year instead of the opposite. Don't tell me these things cannot be done. They require great courage and great strength of character but we can do it. The point is that we have not found the people willing to exercise the muscle."

"I think you have to change the reward system to allow good managers to be identified. And by a good manager I mean results are identified, not process. The system is generally such that an individual who is extremely creative in achieving results will not be rewarded."

You ultimately have to rely on managers

"I think we can improve our management systems, but I think we've established the infrastructure to be able to operate well. We need now, however, to concentrate on the individual manager and show that we're concerned about allowing the individual manager to operate effectively."

"Processes are organized in ways to support the manager in doing his or her job. You've got to have a manager. So a process is only there to help - the process doesn't make things. So, I'm not too concerned about weak processes if you have a strong manager."

"The answer to me is the identification of what our management group is and define how we are going to get our people to get this bag of expertise and skills and attitudes that will make them effective public service managers."

Make Productive Management a Key Priority

2.101 We suggest that the Government develop and initiate activities to make productive management a key priority. We further suggest that this should comprise four components:

1. Encourage and support productive management.
2. Reduce disincentives, increase managerial authority and clarify accountability.
3. Emphasize the development of managers.
4. Support experiments to improve productive management.

2.102 Isolated, sporadic efforts that do not address the three major constraints in the public service management environment are unlikely to have much overall effect. It seems to us that a comprehensive, sustained initiative is required which has the active support of Parliament, Government, Cabinet, central agencies and departments. Such an initiative could open up new opportunities and approaches for improving productive management in the public service.

Encourage and Support Productive Management

2.103 Many of the factors that affect productive management are rooted in the nature of the political process and in the legislation governing financial administration and public service employment. Even though public service managers could make some progress on their own to improve productive management, it is unlikely that major changes could be made without the active support of Cabinet, the Government and Parliament.

2.104 We suggest that, if Government wants to improve value for money in the public service, it should make it a key priority by demonstrating a strong interest in productive management. It should reconcile political and managerial requirements to the extent possible. It should encourage public servants to pursue improvements to productive management. It should explain and set examples of what kind of management is expected in the public service. And it should help to enhance an *esprit de corps* among managers and a greater sense of responsibility for the stewardship of taxpayers' money. Such initiatives would do a great deal to reduce frustration in the public service and to establish an environment that is supportive of productive management.

2.105 In the legislative area, an important step for government would be to review legislation, such as the Public Service Employment Act and the Financial Administration Act, to determine whether there are any aspects of these or other Acts that could be modified to provide more support and better incentives for productive management.

Reduce Disincentives, Increase Managerial Authority and Clarify Accountability

2.106 As long as managers are faced with significant disincentives and excessive administrative constraints, have limited authority to carry out their responsibilities, and are unsure to whom and for what they are accountable, it is unlikely that major improvements in achieving value for money can be made.

2.107 We suggest that Government reduce disincentives to productive management. This would include selective deregulation, based on the ability of individual managers to follow principles of productive management in achieving the particular results for which they are responsible.

2.108 We further suggest that Government ensure that managers have the kinds of authority over resources and processes that better enable them to carry out their responsibilities more productively. This implies that responsibilities and results are clearly defined, to the extent practical. It also implies that the design of administrative procedures including staffing, budgeting, contracting and purchasing, is as much as practical, based on the operational requirements of the situation.

2.109 An effort might be made by Government to clarify accountability relationships. That is to say, ensure that managers clearly understand to whom and for what they are accountable, as far as that is possible in a given situation. A particular effort might be made to simplify the many accountability demands that deputy ministers now face. This is one problem raised by the Royal Commission on Financial Management and Accountability that has not yet been resolved.

2.110 In addition, Government might encourage better communication mechanisms between central agencies and departments, senior and middle management, headquarters and regions, as well as staff and line management. The aim should be for managers to understand the expectations their colleagues must satisfy, so that there is mutual appreciation rather than suspicion when conflicting demands arise.

2.111 The effect of implementing this set of suggestions would be a shift from reliance on regulations, controls and detailed procedures toward greater reliance on managers' competence and their achievement of results. A consequence would be that costly and burdensome administrative constraints which characterize the present system would, to some extent, become unnecessary.

Emphasize the Development of Managers

2.112 If increased reliance is to be placed on managers and their achievement of results, much more emphasis needs to be given to the kinds of experience and skills they need. Also, much more emphasis needs to be placed on assessing their performance.

2.113 The public service will always need people who can harmonize political and managerial objectives, balance the mix of resources required to deliver programs and cope with administrative constraints. Productive management ultimately depends on managers who are able to achieve objectives within the context of difficulties inherent in the public service environment.

2.114 The Government might therefore strengthen its management development programs. It might embark on a long-range program to develop the management talent it will require over the next decade or two. Government-wide and departmental programs might be devised that select prospective managers at an early age and develop them through a series of assignments involving all the critical aspects of management. In the course of their development, managers might be regularly assessed with respect to their abilities, judgement and their suitability for various types of positions. Managers are an important element in achieving productive management. Their skills are the key to achieving value for money. Hence, their development is crucial to a productive public service.

Support Experiments to Improve Productive Management

2.115 Our last suggestion is to support experiments to improve productive management. It is difficult to introduce changes in an organization as large, complex and diverse as the public service without creating additional problems. Experiments, on the other hand, provide a means to test new ideas with minimal risk and expense. In addition, they can provide opportunities for public servants to come forward with suggestions and alternatives for management improvement.

2.116 We suggest, therefore, that Government support experiments and pilot projects within the context of an overall initiative to improve productive management. This would provide opportunities for central agencies and departments to look for ways to reduce detailed controls, to modify disincentives, to test incentives, to increase authority and accountability of managers and to try new approaches in management development.

2.117 The experiments could deal with perceived government-wide constraints such as staffing, administrative procedures, common services, and information requirements by central agencies. They could also assist departments to identify and deal with constraints to productive management that originate within departments. The very existence of such experiments would provide encouragement for productive management, and they would be focal points for the removal of some of the obstructions to productive management.

2.118 Such experiments would have to be carefully designed, executed and monitored. They should clearly be part of an overall comprehensive initiative for the improvement of productive management. However, care must be taken to avoid the creation of the kind of central group that itself will eventually be seen as being a constraint of the sort it is supposed to help overcome. The major role of a small central group would be to identify or confirm potential experimental areas and ensure an appropriate mix of projects. The group should also provide the competence and continuity to analyse results of individual

experiments and to develop recommendations for changes in policy with respect to management in the public service.

A Final Note

2.119 The Canadian public service is acknowledged by other countries for its management practices. Its management systems and approaches have evolved considerably over the years. Yet, there remain significant opportunities for improvement in terms of value for money. While our study indicated serious constraints to productive management in the public service, we noted that similar constraints exist in other countries. The challenge of achieving productive management in public service organizations, therefore, lies in the fundamental difficulty of reconciling political requirements with management requirements.

2.120 We believe there are no magical solutions, and no villains. There are simply many very difficult and complex problems that require a great deal of courage, tenacity, openness and good will to solve. We also believe that the majority of public service managers are capable, and committed to improvement. The task before us is to tap their potential for excellence by providing them with the support, encouragement and incentives they require to achieve the goal we all seek: more productive management in the public service.

PROGRAM EVALUATION

PROGRAM EVALUATION

Table of Contents

	Paragraph	Page
SYNOPSIS	3.1	93
<i>The Government's Response</i>		99
Introduction	3.33	101
Audit Purpose	3.38	101
Development of Program Evaluation	3.41	102
Audit Scope	3.51	106
Audit Criteria	3.60	108
Observations and Recommendations		
Program Evaluation in Departments and Agencies		
Organization and Management for Program Evaluation	3.63	109
Organizational Requirements	3.64	110
Program Evaluation Initiatives	3.93	116
Type and Extent of Evaluation Activities	3.96	117
Report Quality	3.123	121
Reporting and Using Evaluations	3.127	122
Government-wide Program Evaluation Issues	3.146	125
Interdepartmental Evaluation	3.151	125
Small Agencies	3.164	127
Crown Corporations	3.167	128
Reporting to Parliament	3.173	129
Parliamentary Tabling	3.175	129
Exhibits		
3.1 Chronology of Key Events in the Development of Federal Program Evaluation		103
3.2 The Program Evaluation Process		105
3.3 Departments Audited		107
3.4 Number of Departments with a Corporate Evaluation Unit by Fiscal Year		111
3.5 Number of Departments with a Deputy-Approved Corporate Evaluation Policy by Fiscal Year		112
3.6 Departmental Evaluation Planning Tasks as of 31 March 1983		114
3.7 Number of Completed Program Evaluations by Fiscal Year		119

Key Terms

Used to Describe Program Evaluation Initiatives

- **Evaluation Framework:** a brief analysis of a program to assess the degree to which the objectives, mandate, and structure are clear and realistic, and to confirm that the data required for future evaluations will be available. This is required for all new or significantly modified programs.
- **Evaluation Assessment:** an examination of the environment, structure, and operation of a program to identify the evaluation issues and group these into costed approaches and options for the deputy head. This is the key planning document for a program evaluation study.
- **Evaluation Study:** a report of the findings of an empirical examination of a program based on the terms of reference set out in the evaluation assessment and approved by the deputy head.
- **Program evaluation** is defined by the Government as "the periodic, independent and objective review and assessment of a program to determine, in light of present circumstance, the adequacy of its objectives, its design and its results both intended and unintended. Evaluations will call into question the very existence of the program. Matters such as the rationale for the program, its impact on the public, and its cost effectiveness as compared with alternative means of program delivery are reviewed."

PROGRAM EVALUATION

SYNOPSIS

Development of Program Evaluation

3.1 In the 1960s, the awareness that program effectiveness lies at the heart of good public sector management led increasingly to a recognition that formal procedures to measure the effectiveness of public programs were necessary. This happened for a variety of reasons, but two are noteworthy. First, the state of the art in social research had advanced to the point where useful measurement of attainment of program objectives was possible. Second, a growing concern for value for money in complex and expensive public programs led to a rising demand for proof that the expenditures were cost-effective.

3.2 The Government of Canada began to place a growing emphasis on program evaluation in the late 1960s when departments and agencies were encouraged to establish central Planning and Evaluation Divisions by having Treasury Board make resources and person-years available to them. The departments responded. As a 1974 Treasury Board study noted, they had established planning and evaluation units involving approximately 3,500 person-years. However, that study also found that little program evaluation was being done. Most of the effort was apparently being directed to policy analysis and planning.

3.3 In 1977-78, we conducted a government-wide study of program evaluation, looking at 23 programs in 18 departments and agencies. We also found few successful attempts to conduct program evaluations. During that audit, the Government issued a Policy Circular (Treasury Board, 1977-47) which required all departments and agencies to establish procedures to evaluate systematically the efficiency and effectiveness of their programs.

3.4 In 1978, the Office of the Comptroller General was established and given functional responsibility for implementing this new policy. Since then, it has developed a policy framework to guide and structure departmental evaluation functions. This has been published in two documents: *Guide on the Program Evaluation Function* (May 1981); and *Principles for the Evaluation of Programs* (September 1981). By establishing a team of liaison officers to give guidance and advice to departments, the Office of the Comptroller General has also taken an active role in encouraging and assisting departments to implement the policy framework.

3.5 It is not easy to establish a new function like program evaluation on a consistent basis throughout government. In this case, the task was made more difficult because many senior managers were sceptical about the value of program evaluation, and there was a shortage of qualified program evaluators. To deal with this, the Office of the

Comptroller General set as its first target getting evaluation units established in the larger departments and agencies and encouraging them initially to attempt useful program evaluations of small programs, or those of limited scope, to gain experience and to enhance credibility with management.

Audit Focus

3.6 The purpose of this audit was to report on the progress made in establishing program evaluation in the federal government over the five years since our 1978 Report. To do this, we selected a sample of 19 departments and agencies across government and audited their program evaluation functions. In each case, we looked at two areas:

- the infrastructure for program evaluation, including its policy, plans, resources and management, to assess the degree to which the organizational elements necessary to maintain a functioning and productive unit were in place;
- the conduct, reporting and use of program evaluations to assess the degree to which they have been carried out in accordance with government guidelines, reported in a balanced and fair way to the appropriate officials, and used by them.

3.7 Our audit criteria were developed from two sources: The Report of the Public Accounts Committee, tabled in the House in July 1980, in which it endorsed the five basic criteria set by our Office for auditing evaluations; and the Office of the Comptroller General's policy framework which was used to provide a more detailed elaboration of these criteria.

3.8 Our observations are divided into three parts. The first two deal with the findings of our audit of program evaluation in 19 departments and agencies. The last section deals with matters of a government-wide nature affecting program evaluation.

Organization and Management for Program Evaluation

3.9 In auditing the development of program evaluation functions in 19 departments and agencies, we found that the government has made significant progress in establishing a program evaluation function in its departments and agencies. All the departments and agencies we audited have established corporate program evaluation units. In 1982-83, the 19 units used 168 person-years of staff time and spent just over \$3 million contracting with outside consultants for professional and special services. Only two of the departments did not have deputy-approved policies for program evaluation, although one of these has subsequently been approved.

3.10 To ensure that program evaluations are carried out systematically and on a cyclical basis, departments are required to develop a long-term plan to evaluate all their

programs. Sixteen of the 19 departments had approved long-term evaluation plans, 2 had draft plans and 1 had no plan.

3.11 There were a number of areas in which the management practices of the evaluation units could be improved. In particular, these concerned the control of projects, both with respect to timing and resources. Further, in many units, adequate documentation for studies was not maintained, nor was information available to some managers to enable them to account for resources used on evaluations.

Program Evaluation Initiatives

3.12 By contrast with our findings in 1978, we found that departments have made considerable progress in planning and carrying out corporate program evaluations. Seventeen of the 19 departments have evaluation initiatives under way, and 15 of these have completed at least one program evaluation study. Many have completed more. Overall, we found that 6 evaluation frameworks, 119 evaluation assessments, and 86 program evaluation studies had been completed.

3.13 In those departments with relatively more experience and in which we were able to identify a trend, we observed improvements in the quality of evaluations undertaken. However, we also identified a number of areas where further improvements are required. A significant proportion of evaluation assessments did not form an adequate basis for sound advice to the deputy for planning the evaluation study. In a number of cases, limitations in the study could be traced back to weaknesses in the assessment.

3.14 A substantial number of the evaluation studies had significant weaknesses in the methods used to carry out planned work, particularly with respect to measuring program effectiveness. We found poorly designed questionnaires; unreliable data; data that were incomplete and/or lacked objectivity; inadequately specified sample designs; and samples that were too small for the purpose intended, or biased. As a result of these problems, approximately half the studies which attempted to measure the effectiveness of programs were unable to adequately attribute outcomes to activities.

3.15 It is important to note that most study reports included discussions of qualifications of the findings, although, in some instances, these were not as complete as they should have been.

3.16 Even in those cases where difficulties were encountered in planning and carrying out assessments and studies, it was often the case that parts of these produced information that is sound and that departmental managers found useful.

3.17 The 43 studies that we audited in depth covered a wide range of topics, and most addressed at least one of the four basic program evaluation issues:

- over three-quarters attempted to address program rationale, raising questions about the continuing relevance of, or need for, the program;
- three-quarters attempted to measure the degree to which the program had achieved one or more of its goals and objectives;
- a similar proportion tried to determine the extent to which the observed changes had occurred as a result of the program; and
- half attempted to assess the degree to which there were cost-effective alternatives to the program.

3.18 The recommendations arising from these studies covered an equally wide range. They dealt with matters such as changing program support activities, program design, and the size of the program. In most instances these recommendations have been accepted by senior management and acted upon.

3.19 We found that, in almost all instances, evaluation reporting has followed procedures set out in the departmental evaluation policy. All departmental policies require reporting to the deputy, and nearly all require reporting to other responsible levels of program management. Instances of failure to report evaluations have been infrequent, and steps have been taken to ensure appropriate reporting. However, we also found that the reporting of studies in the Strategic Overviews under the Government's new Policy and Expenditure Management System could be improved.

Government-wide Issues

3.20 We used the program evaluation guidelines issued by the Office of the Comptroller General as a basis for expanding and elaborating on the audit criteria developed by our Office for our 1978 study and endorsed by the Public Accounts Committee in 1980. We believe that these guidelines provide a useful basis for departments to organize, plan and conduct program evaluation work. Also, as noted earlier, the implementation strategy followed by the Office of the Comptroller General involved an initial emphasis on establishing evaluation units in the major departments and agencies and on encouraging these departments to conduct evaluations, even of a limited nature. In our opinion, this has been a reasonable way in which to proceed. However, we noted several areas where the policy framework may need to be modified or extended.

3.21 The current policy framework for program evaluation has the department and the deputy head as the central focus of program evaluation activity. However, many important programs are delivered in a way that involves more than one department. Further, the basic structure of the Policy and Expenditure Management System stresses the interdepartmental nature of program decision making.

3.22 Although current policy and guidelines recognize the existence of interdepartmental programs, they fail to specify procedures to be followed in conducting evaluations of them. The consequence of this is that interdepartmental programs are not systematically being subjected to the same type of orderly review and evaluation as programs administered wholly within single departments and agencies.

3.23 Most of the agencies which had not developed an infrastructure for evaluation were small. As part of its implementation strategy, the Office of the Comptroller General has only recently given full attention to the way in which evaluations of these agencies' programs should be carried out.

3.24 Crown corporations are being used by the Government to achieve public policy objectives, and funds for these purposes are being provided through the Estimates. We found that, in general, public policy objectives of Crown corporations were not subject to program evaluation, nor were they being scheduled for program evaluation. As of 31 March 1983, five Crown corporations were establishing program evaluation functions in liaison with the Office of the Comptroller General.

3.25 In its review of the 1978 Auditor General's Report, the Public Accounts Committee recommended to the House, in July 1980, that all effectiveness evaluations be tabled in the House of Commons within 60 days of their completion. The Government responded, in October 1980, through the President of the Treasury Board, that:

With enactment of the Access to Information Bill as currently proposed, and approval of a draft Treasury Board policy on the documentation of program evaluation studies, such information would be publicly available. Some procedure, perhaps tabling of evaluation reports within 60 to 90 days of their completion by the responsible Minister, will have to be established to ensure easy access by Members of Parliament.

3.26 On the basis of our audit work we found that, since 1980, only one program evaluation report has been tabled in the House.

Summary

3.27 While we were sharply critical of the situation we observed in 1978, we also stated that "the recent emphasis the Government of Canada has placed on program evaluation could, if developed and sustained, put it among the leaders in the field." Leadership does not come easily. The task which the Government has set for itself is to make program evaluation an integral part of public sector management. This requires no less than a commitment on the part of the Government to critically examine the success of its own programs and policies.

3.28 We found that very real progress has been made. Most of the major departments and many of the agencies have the basic infrastructure for evaluation in place. Many of these are actively attempting to carry out evaluations. However, the quality of the evaluations needs to be improved.

3.29 To achieve these improvements in quality, the government's commitment must be made evident through requests for the evaluation of its programs, appropriate staffing of departmental evaluation branches, and the distribution of evaluation reports.

3.30 Program evaluation requires asking fundamental questions about a program's existence. Requests for evaluations should make explicit what the program is trying to achieve and against what it should be evaluated.

3.31 In getting the results achieved thus far, one of the major problems the Office of the Comptroller General and departments have faced has been a shortage of appropriately trained and qualified evaluators. This shortage continues, and if the progress and momentum achieved thus far are to be maintained, the development of a cadre of qualified professional program evaluators will be one of the major challenges to be met.

3.32 Finally, the quality of evaluations should improve with experience. This process requires that evaluation reports be widely distributed. Broader scrutiny will help ensure higher quality products. It will also help to ensure that lessons learned in one study will be available to build on in the next.

The Government's Response to the Auditor General's 1983 Audit Report on
Program Evaluation

The Government's approach to evaluation of programs aims at ensuring that relevant and reliable information is produced on the continuing need for, performance of, and relative cost-effectiveness of programs. In its approach to the establishment of the program evaluation function, the Government has been mindful of the need to ensure procedures for the conduct and consideration of evaluations which enhance their credibility and actual use, as well as being mindful of the significant cost of conducting studies. Accordingly, the approach taken to establishing the program evaluation function is one of integrating evaluation within the improving management practices in departments and with the Policy and Expenditure Management System, while the approach to conducting evaluations is one which balances the need for objectivity with the need to link evaluation closely with line management of government programs.

This audit, coming midway through the planned initial development phase, is a timely progress report on the approach the Government has taken, the accomplishments to date and the main work yet to be done. The findings, taken as a whole, represent to the Government an endorsement of its approach and confirm the substantial progress achieved. The recommendations, in general, are helpful and supportive of the Government's efforts and, with a few exceptions, outline a program of work largely consistent with the Government's plans in this area.

The infrastructure in terms of evaluation policies, plans and organizations is in place in most of the major departments and agencies throughout the Federal Government. Furthermore, the Office of the Comptroller General is working now with smaller departments and agencies and Crown corporations to assist them in developing an appropriate approach to evaluating their programs. As of September 30, 1983 a total of 90 departments and agencies were liaising with the Office on program evaluation, 19 of which were Crown corporations.

The audit identified problems in the quality of a number of evaluation studies produced between 1980 and March 1983. It also notes significant improvements in quality over this time period, especially in departments which have had relatively more experience in conducting studies. This confirms the Government's view and, notwithstanding the noted progress, this is an area where further work is required. Among the several recommendations aimed at improving quality is the recommendation that further steps be taken to ensure the availability of qualified evaluators. This is not only a question of acquiring technical skills. Fully qualified evaluators require a combination of technical and managerial skills and a thorough knowledge of programs and program management in the Federal Government. Such knowledge and skills are fully obtained only through appropriate experience. Accordingly, while the need is recognized and is being addressed, progress will be gradual. The Office of the Comptroller General, for its part, offers an ongoing series of seminars and workshops on evaluation, is consulted on most senior staffing actions in evaluation and has recently distributed a discussion paper on human resources management in the evaluation function to departments and agencies. The paper includes a number of proposals concerning the development of evaluation personnel.

Although adequate infrastructure and appropriate quality are required for producing good quality evaluations, the Government's central concern is that the findings of the studies be used in the ongoing management of government. As this report notes, some action has been taken on the recommendations of most of the studies produced to date. This audit finding is particularly welcome and likely reflects the approach several departments have taken in their initial evaluations. In particular, approaches which involve both senior management and line managers in the evaluation and which focus on issues on which departments can act appear to be the most successful.

This audit report includes a number of recommendations relating to the availability of evaluation findings to Parliament. At this time, it appears that the most effective and appropriate way for reporting such information to Parliament would be to include the key findings of evaluations, where relevant, in the Part III of each department's Estimates. This would provide for relevant findings on the effectiveness of programs to be presented in a concise manner to Members of Parliament. Access to information legislation, of course, provides for any member of the public to request a particular evaluation study. Accordingly, it would seem that a requirement to report also in departmental annual reports would be unnecessary, as would be, perhaps, other procedures to table reports in the House. With these developments, it may be appropriate for the Public Accounts Committee to consider the need for tabling all evaluation study reports, as had been recommended prior to these developments.

Finally, the audit report recommends that there is a need for an improvement of procedures to conduct interdepartmental evaluations. Such evaluations have taken place in the past and several are now under way. Existing procedures of the Cabinet Committee system do provide for the identification of the need for such evaluations, but few have been called for, perhaps due to the need first to demonstrate the success of evaluation on less complex issues. The Office of the Comptroller General is currently preparing discussion papers on evaluation in several interdepartmental areas and will be exploring further procedures to facilitate such evaluations whenever there is a demonstrated need for them by an agency which can act on the findings.

This audit of the program evaluation function in the Federal Government has been useful and its findings provide a valuable information base for deciding the future directions the Government will be taking in developing and enhancing the evaluation capability of departments and agencies. As confirmed by this audit report, the continued development and indeed existence of this evaluation capability will require a continual monitoring by the Office of the Comptroller General. Increasing attention will be devoted toward improving the quality of evaluation products and to ensuring that the evaluation findings are used by all levels of management within government.

Introduction

3.33 A basic tenet of good management is the use of feedback on the achievement of objectives. A good manager sets objectives, defines specific goals in relation to them, and monitors achievements accordingly. Adjustments can then be made to work more efficiently and effectively toward the desired ends. In the private sector, goals and objectives are primarily defined in terms of profit, market share, and return on equity. Their measurement is carried out and reported in financial terms. These yield the well known "bottom line".

3.34 In government, measuring achievement is not as straightforward. Departments and agencies deliver a vast array of goods and services to a wide variety of clients. What most of these services have in common is that the objectives to be achieved, and the degree to which these are met, are often unclear and seldom easily measured.

3.35 The increasing emphasis on value for money in public sector management has led to the view that, if improvements in the economy, efficiency and effectiveness of government programs are to be achieved, systematic procedures need to be used to more precisely understand program activities and to measure program impacts and effects.

3.36 Program evaluation has as its hallmark a concern with measuring client needs, program implementation, and program effects to assist in the more efficient and effective management of the program. In this way, it represents an attempt to provide the public service manager with the bottom line which his private sector counterpart takes for granted. Program evaluation in the federal government refers specifically to the periodic, independent and objective assessment of programs to determine the adequacy of objectives, design and results.

3.37 Some form of evaluative activity has always been undertaken in the federal government. Program managers and policy makers have collected different types of information so as to make judgements about the effectiveness, efficiency and worth of programs. The distinguishing characteristic of recent federal government efforts is the policy framework established for systematic planning, conducting and reporting program evaluation studies.

Audit Purpose

3.38 In Chapter 5 of our 1978 Report, following a government-wide study of program effectiveness evaluation in government, we concluded that:

A review of 23 programs in 18 departments has disclosed few successful attempts to evaluate the effectiveness of programs. The scope and quality of effectiveness evaluation will have to be increased significantly before management, the Government and Parliament, each with its respective interests, can be reasonably informed on the achievements of public programs.

3.39 Our 1978 Report, however, also sounded a note of optimism for the future of federal government evaluation activities:

... it can be said that the recent emphasis the Government of Canada has placed on program evaluation could, if developed and sustained, put it among the leaders in the field.

3.40 Five years have passed since those observations were made and, in this audit, we report on the extent to which progress has been made toward establishing program evaluation in the government.

Development of Program Evaluation

3.41 Over the last decade, the Government has attempted to establish program evaluation in departments and agencies. Exhibit 3.1 represents a chronology of key events. Over that time, three approaches have been taken.

3.42 First, in the late 1960s and early 1970s, there were attempts to encourage the development of planning and evaluation units in departments and agencies by providing staff and resources. Under Treasury Board sponsorship, evaluations were carried out to show that they could be done. However, in 1974, a Treasury Board study found that little progress had been made in evaluating programs.

3.43 Second, in 1977, the Government issued a policy circular (TB 1977-47) requiring departments and agencies to carry out program evaluations systematically. There was some response to this policy statement, with some departments establishing corporate program evaluation units and, in those departments that already had ongoing evaluation functions, there was an increase in activity.

3.44 Third, in 1980, the Office of the Comptroller General began an effort to establish program evaluation throughout the government. Its Program Evaluation Branch has taken a variety of steps to help ensure that federal departments and agencies establish evaluation units to plan and carry out program evaluation studies. The Branch has provided departments with detailed guidelines for planning and carrying out program evaluations, advice and assistance on doing evaluation work, and training courses to enhance the knowledge and skills of departmental evaluation staff. Moreover, the Branch is involved in assisting departments in the classification and staffing of program evaluation positions.

3.45 In 1981, the Office of the Comptroller General issued a set of detailed guidelines providing a policy framework for program evaluation and setting clear expectations for program evaluation work in government departments. The *Guide on the Program Evaluation Function* addresses three fundamental questions: How should a program evaluation unit be organized in a government department? What should be the

CHRONOLOGY OF KEY EVENTS IN THE DEVELOPMENT OF FEDERAL PROGRAM EVALUATION

- Late 1960s, - early 1970s Departments and agencies were to establish Planning and Evaluation units.
- 1974 - Treasury Board Study on Planning and Evaluation finds that "most departments had not attempted to organize the program evaluation function...even though man-years and in many cases executive resources had been allocated to departments for this function."
- 1976 - Treasury Board Study of Departmental Evaluation Activity concludes that "little headway has been made in the evaluation function...across the federal government."
- 1977 - Treasury Board Policy Circular on Program Evaluation (TB1977-47).
- 1978 - Annual Report of the Auditor General - Study of Procedures in Cost Effectiveness finds few successful program evaluations in the federal government.
- - Office of the Comptroller General created and assigned responsibility for the program evaluation function.
- 1980 - Public Accounts Committee issues a report and endorses five basic criteria for auditing the evaluation of program effectiveness.
- - Office of the Comptroller General circulates its policy framework for program evaluation in draft form, and begins liaison with major departments on program evaluation.
- - Program evaluation function linked to the Policy and Expenditure Management System.
- 1981 - Office of the Comptroller General issues Guide on the Program Evaluation Function, and Principles for the Evaluation of Programs.

focus of the work? How should this work be carried out? These questions are to be addressed in the form of a departmental program evaluation policy, program evaluation component structure and program evaluation plan.

- The departmental program evaluation policy should describe the organization of program evaluation in the department, as well as the procedures to be followed for carrying out evaluation work.
- Program evaluation components are the groupings of resources, activities, and outputs related to a common objective or set of objectives, the focus of evaluation work.
- The departmental program evaluation plan presents a schedule for the cyclical evaluation of the program evaluation components.

3.46 Three types of evaluation initiatives are covered in the guidelines. The relationship among these is shown in Exhibit 3.2. These are as follows:

- an evaluation assessment, which serves as a proposal and plan for an evaluation study;
- the program evaluation study; and
- an evaluation framework, a planning document that is to be completed during the design and implementation of all new, significantly modified or, where appropriate, renewed programs.

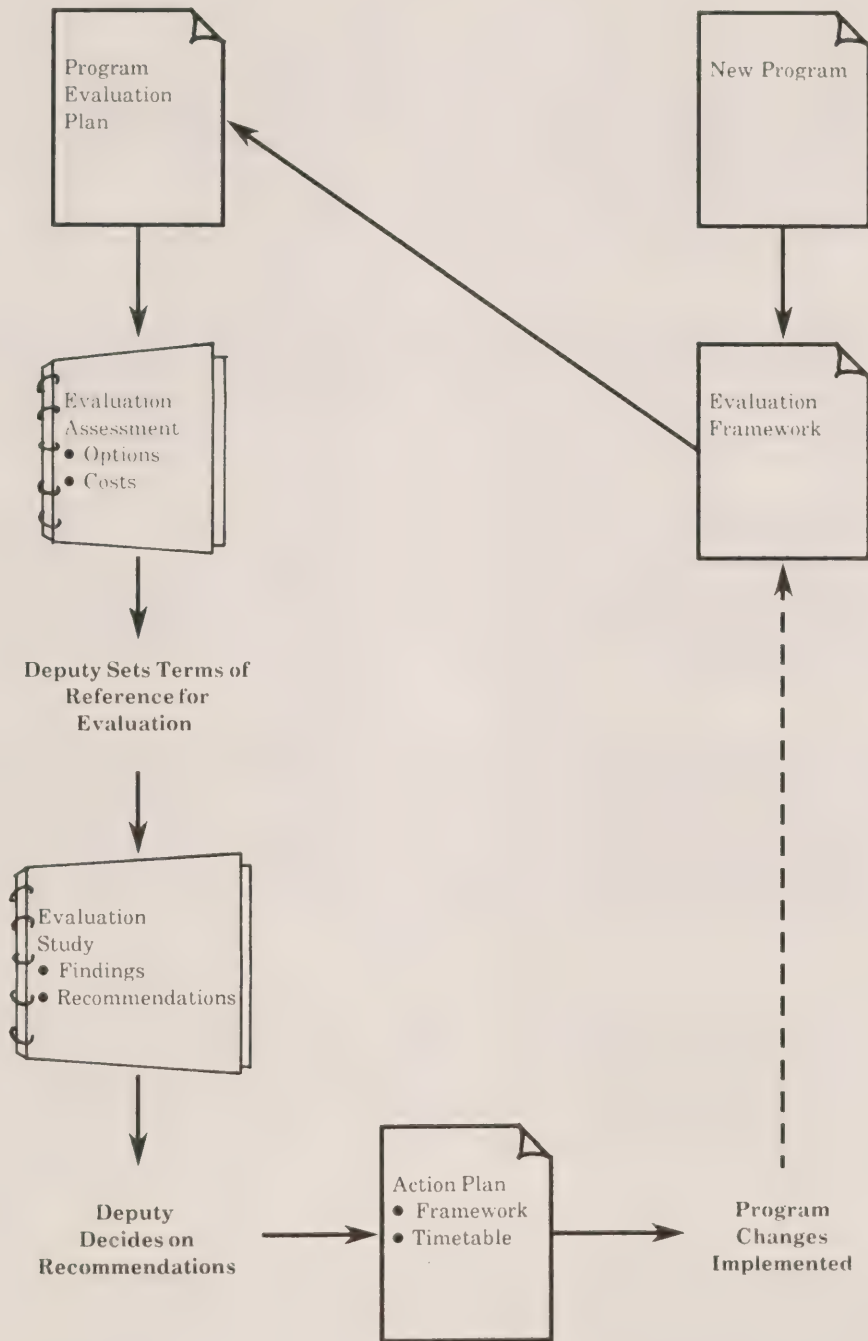
3.47 The government policy framework for evaluation has been implemented in departments with the assistance of staff from the Comptroller General's Office. Liaison officers have been assigned to work with government departments and agencies, providing advice and assistance on how to plan and carry out useful and credible evaluations. The Policy Branch has worked on extending the framework and acting as a link between the departments' evaluation functions and the respective Cabinet envelope committee secretariats.

3.48 In implementing the policy framework, the Office of the Comptroller General has established the following priorities:

- Initially, to assist in establishing an evaluation organization in the major departments and agencies of the Government.
- Then to encourage departments and agencies to begin to carry out program evaluation studies, even if only of a limited nature.
- Then to turn attention to the smaller agencies and to determine what arrangements for evaluation would be most appropriate.

Exhibit 3.2

THE PROGRAM EVALUATION PROCESS



- Over time, to extend the scope and raise the quality of the evaluations being produced by all departments and agencies.

3.49 The Comptroller General's objective is, by 1985-86, to see departments develop to the stage where they can regularly carry out useful and high quality program evaluations.

3.50 On the basis of our review of government program evaluation in western industrial societies, we have been unable to identify any other central government that has attempted to establish a policy framework for program evaluation comparable in scope to that established by the Canadian federal government.

Audit Scope

3.51 This audit covers program evaluation in the federal government, based on an examination of 19 departments. In them, we examined the organization and management of corporate program evaluation units as well as the planning, conduct, reporting and use of program evaluation studies.

3.52 Our examination of the corporate program evaluation units covered organizational arrangements, resources, evaluation policies and plans. We also examined evaluations completed by the corporate units as of 31 March 1983, as well as the planning and design of evaluations, data collection and analysis, quality control procedures, and the reporting and use of evaluations.

3.53 Two groups of departments and agencies are covered by this audit. The first group is made up of nine departments and agencies scheduled for audit reporting in 1983. The second group covers 10 departments and agencies where we followed up on audits of program evaluation carried out in earlier years. By covering these two groups in this audit, we are able to provide a broad and generally representative view of the progress made by the government in establishing program evaluation.

3.54 Exhibit 3.3 presents information about the 19 departments covered by this audit. It shows the audit reporting year(s), along with information about whether the department was covered by our 1978 audit of program effectiveness evaluation, and information on estimated resource expenditures for 1983-84. More detail on the departments which were subject to comprehensive audits this year can be found in the departmental chapters of this Report.

3.55 In addition to the audit work carried out in the 19 departments, we also examined activities carried out by the Office of the Comptroller General in implementing the Government's program evaluation policy framework. In this connection, we audited certain of the information maintained by the Office of the Comptroller General on the level

DEPARTMENTS AUDITED

	Audit Reporting Year(s)	Reported in 1978 Government- wide Audit	1983-84 Estimates Program	1983-84
			Dollars (billions)	Person-years (thousands)
Agriculture	1982	Yes	1.1	10.8
CCA	1981	Yes	.2	2.5
CEIC	1982&83	Yes	4.7	25.0
Correctional Services	1981	No	.7	10.1
DIAND	1980	Yes	1.8	6.2
Communications	1983	No	.2	2.3
Fisheries	1981	No	.5	5.9
EMR	1982&83	No	2.5	5.0
Labour	1983	Yes	0.8	.8
Health & Welfare	1982	No	21.9	9.4
Library/Archives	1983	Yes	.07	1.3
Parole Board	1978	Yes	.01	.3
RCMP	1981	No	.8	21.3
Taxation	1980	Yes	.6	18.2
Secretary of State	1978	Yes	2.4	3.1
Solicitor General	1983	No	.02	.2
Statistics Canada	1983	No	.2	4.5
Transport	1982&83	No	2.6	21.8
Veterans Affairs	1980	Yes	1.4	4.3

of program evaluation activity across the 56 government departments and agencies with which it was liaising as of 31 March 1983. Based on our audit work, we found this information to be accurate and will present it throughout this chapter in conjunction with information obtained from our audit of 19 departments.

3.56 Our audit mandate, as stated in Section 7(2)(e) of the Auditor General Act, requires that we report to Parliament any instances in which we have observed that satisfactory procedures to measure and report on program effectiveness have not been implemented, where it would have been reasonable and appropriate to do so. The relationship between our mandate and the focus of this audit requires that two distinctions be made.

3.57 The first distinction is between the focus of program evaluation in the government and our audit mandate on program effectiveness measurement. As used in the government, program evaluations may cover a broader range of issues than those of program effectiveness, or not cover questions of program effectiveness at all.

3.58 The second distinction between our mandate and the scope of this audit concerns the possible ways in which effectiveness measurement can be carried out. These involve 1) periodic effectiveness evaluation studies done on an occasional and as-needed basis; 2) ongoing effectiveness monitoring systems; and/or 3) periodic program evaluations done on a systematic and cyclical basis. In each case, the focus may be on measuring and reporting program effectiveness. Usually, what differs is the relative frequency of taking measurements and the level and frequency of reporting results along with the nature of the organizational unit responsible for doing so.

3.59 The government emphasis has been placed on the third of these approaches – periodic program evaluation studies carried out on a cyclical basis by a corporate or department-wide evaluation unit with the deputy head as the primary client. Thus, we have focused the audit on the corporate program evaluation function and the evaluation initiatives completed by such units. As a result in this chapter, we are not reporting on evaluation-like activities done outside corporate evaluation units, nor on program effectiveness monitoring procedures.

Audit Criteria

3.60 The basic criteria that we use in auditing program evaluation were first published in the 1978 government-wide audit of program evaluation. These criteria were reviewed and endorsed by the Public Accounts Committee in their July 1980 Report. In October 1980, in a letter to the Chairman of the Committee, the President of the Treasury Board endorsed the report saying, "I have discussed its contents with my officers both in the Treasury Board and in the Office of the Comptroller General, and I am pleased to say that we consider the Committee's recommendations positive and helpful." Attached to his letter were annotations on a number of the Committee's recommendations. The only comment

related to our criteria had to do with the issue of reporting evaluations. We discuss this matter later in this chapter.

3.61 The criteria are:

- **Program objectives and effects should be specified as precisely as possible.**
- **Program objectives and effects which can be measured should be identified.**
- **Procedures to measure program effectiveness should reflect the state of the art and be cost justified.**
- **The results of effectiveness measurement should be reported.**
- **Evaluations should be used to increase program effectiveness.**

3.62 We have expanded and elaborated on these criteria, based on the *Guide on the Program Evaluation Function* issued by the Office of the Comptroller General, particularly with respect to the organization and management of the program evaluation function in departments.

Observations and Recommendations

Program Evaluation in Departments and Agencies

Organization and Management for Program Evaluation

3.63 We observed that the Government has made significant progress in establishing a program evaluation function in departments and agencies:

- The Government has assigned functional responsibility for program evaluation to the Comptroller General, who has created a Program Evaluation Branch to provide leadership for the function.
- The Office of the Comptroller General has developed an appropriate policy framework for program evaluation and presented it in the form of a *Guide on the Program Evaluation Function*, published in May 1981.
- All the departments and agencies we audited have established corporate program evaluation units.
- Most of these departments have developed deputy-approved policies and have prepared plans to evaluate their programs on a cyclical basis.

Organizational Requirements for Program Evaluation

3.64 The government policy framework for program evaluation requires the departmental deputy head to be the accountable client for program evaluations. It also requires that there be a designated manager responsible to the deputy head for the evaluation function.

3.65 Four basic principles, underlying the Government's policy framework, require that the evaluation function be:

- **comprehensive** – all the programs delivered by a department are to be assessed for evaluation;
- **systematic** – the way in which each of the departmental programs is considered for evaluation is to be orderly and based on a clearly articulated rationale;
- **cyclical** – all departmental programs are to be considered for evaluation once every three to seven years; and
- **independent** – evaluators are to be organizationally independent from the direct management of the evaluated programs.

3.66 To support a program evaluation function operating in accordance with these principles, the Government requires that an organizational capability for evaluation be established in all departments. It consists of three elements: a corporate program evaluation unit with assigned resources; a program evaluation policy; and a program evaluation planning structure. In addition, the operation of a viable evaluation function requires that each unit combine these elements with good management practices.

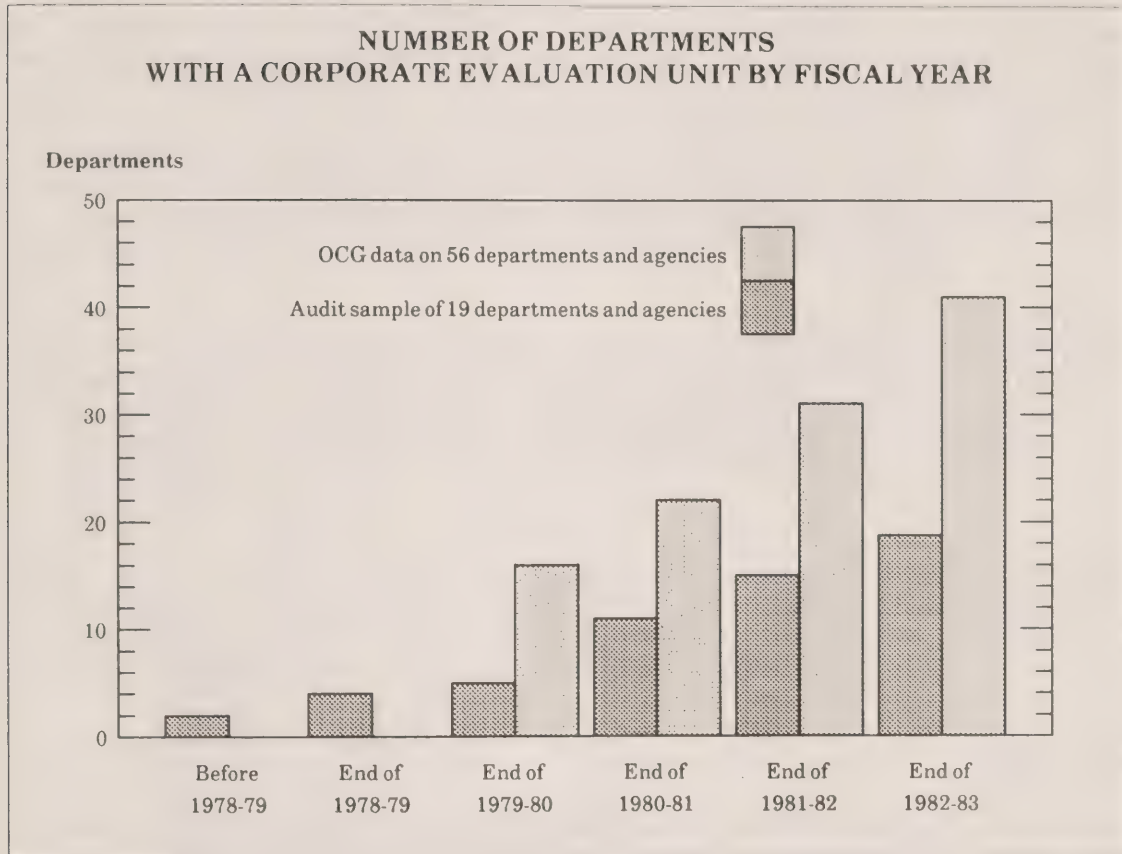
3.67 **Program evaluation units.** A corporate evaluation unit is to be established in each department and consist of a set of positions assigned responsibility for carrying out evaluation work. All 19 departments covered by our audit had established a program evaluation unit by appointing a manager.

3.68 Exhibit 3.4 shows the growth in the number of corporate evaluation units in the 19 departments audited. Only 2 of the 19 have had a corporate program evaluation unit continuously in existence over the 5 years since 1978. Fourteen departments have appointed a manager for corporate program evaluation since 1980.

3.69 Information maintained by the Office of the Comptroller General and presented in Exhibit 3.4 shows that, of the 56 departments and agencies with which they liaise, 41 had established the basic organization for program evaluation.

- The Department of Finance is the only major department in the government subject to Treasury Board circular 1977-47 that has not appointed a manager for program evaluation and has not established a program evaluation unit.
- Many of the smaller agencies in government have yet to establish program evaluation units. Although program evaluation is as important in smaller as in larger agencies, the level of effort required and the organizational arrangements needed can differ.

Exhibit 3.4



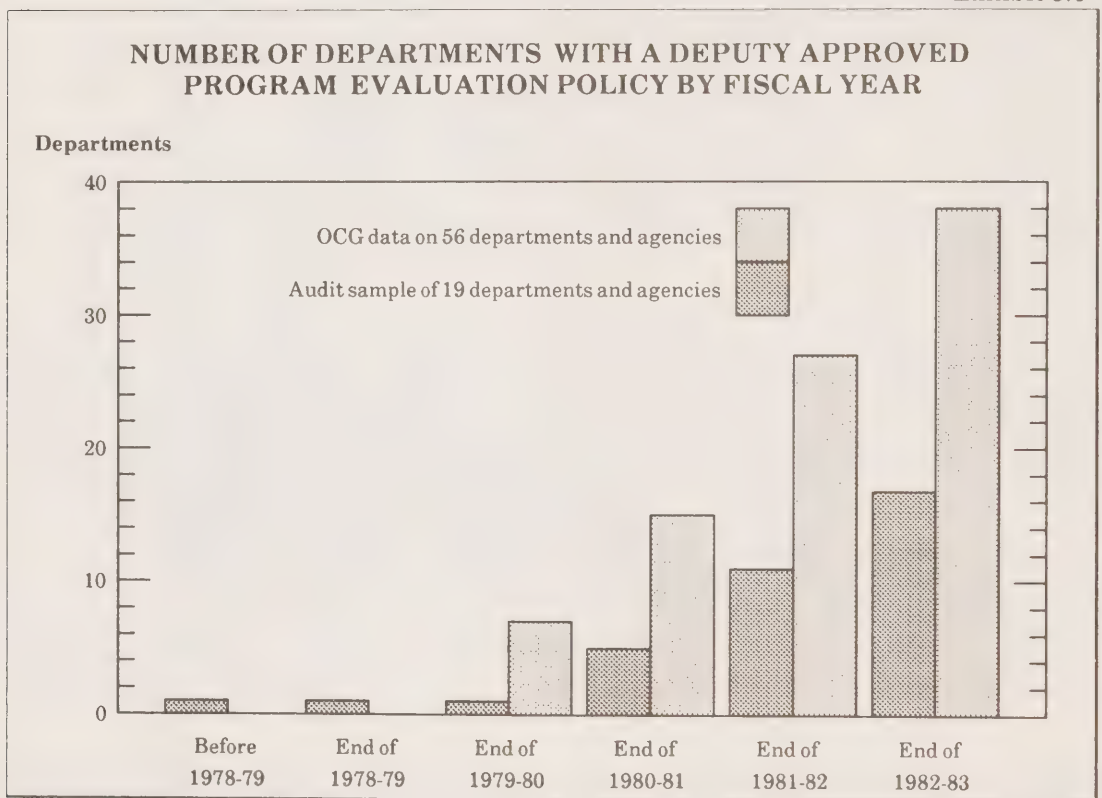
3.70 During 1982-83, the 19 evaluation units had 201 person-years allocated to them and used 168 person-years of staff time. The median size of the units, based on the number of person-years used in 1982-83, is approximately five persons.

3.71 Program evaluation units typically supplement their own staff resources and expertise by contracting with outside consultants for services. The 19 units covered by the audit spent \$3,274,000 on contracted services in 1982-83.

3.72 Program evaluation policy. A key element in the Government's approach to program evaluation is that departments issue a program evaluation policy statement, approved by the deputy head, presenting the basic procedures to be followed in carrying out the mandate, defining the key actors or committees in the process, and assigning responsibility and authority for the function.

3.73 Exhibit 3.5 presents information on the progress made at establishing program evaluation policies in the 19 audited departments. Seventeen had deputy-approved program evaluation policies in place as of 31 March 1983. Two departments did not have deputy-approved evaluation policies. In one of these, the draft policy has since been approved. In the other, the Secretariat of the Solicitor General, there was no program evaluation policy as of 31 March 1983.

Exhibit 3.5



3.74 As is evident from Exhibit 3.5, most of the departmental evaluation policies have been established in the past three years. Our findings are paralleled by the Office of the Comptroller General's government-wide information in Exhibit 3.5, showing that 38 of 56 departments and agencies have deputy-approved policies in place. A large proportion of departments and agencies without a program evaluation policy are smaller agencies.

3.75 We audited the 17 approved policies against the standards set for them by the Government. We found that, in general, these policies are capable of serving as a working basis for a program evaluation function.

3.76 The involvement of program managers in evaluations is important. We found that many of the departmental program evaluation policies required that this be done by setting up, for each study, an advisory committee that includes the program manager. Further, we found that the use of such committees was common in those departments which did not have this requirement in their policy.

3.77 **Program evaluation plans.** Another important element in the Government's approach to program evaluation is that all the program components in a department are to be identified for evaluation purposes, and a long-term evaluation plan is to be developed to specify the order in which the evaluations are to be undertaken. The development of evaluation plans helps ensure that the evaluation process will be comprehensive, systematic and cyclical.

3.78 Our audit focused on three planning tasks: the program evaluation component structure and related profiles describing each component; long-term evaluation plans; and the annual update of these plans, which sets out in detail the evaluation activities planned for the current year. Exhibit 3.6 shows for each of these tasks the number of departments meeting the requirement.

3.79 We found that 16 of the 19 departments had approved program evaluation component structures, and 2 departments had draft component structures awaiting Deputy Minister approval, as of 31 March 1983. The appropriate departmental activities were covered in all of the approved or draft evaluation component structures.

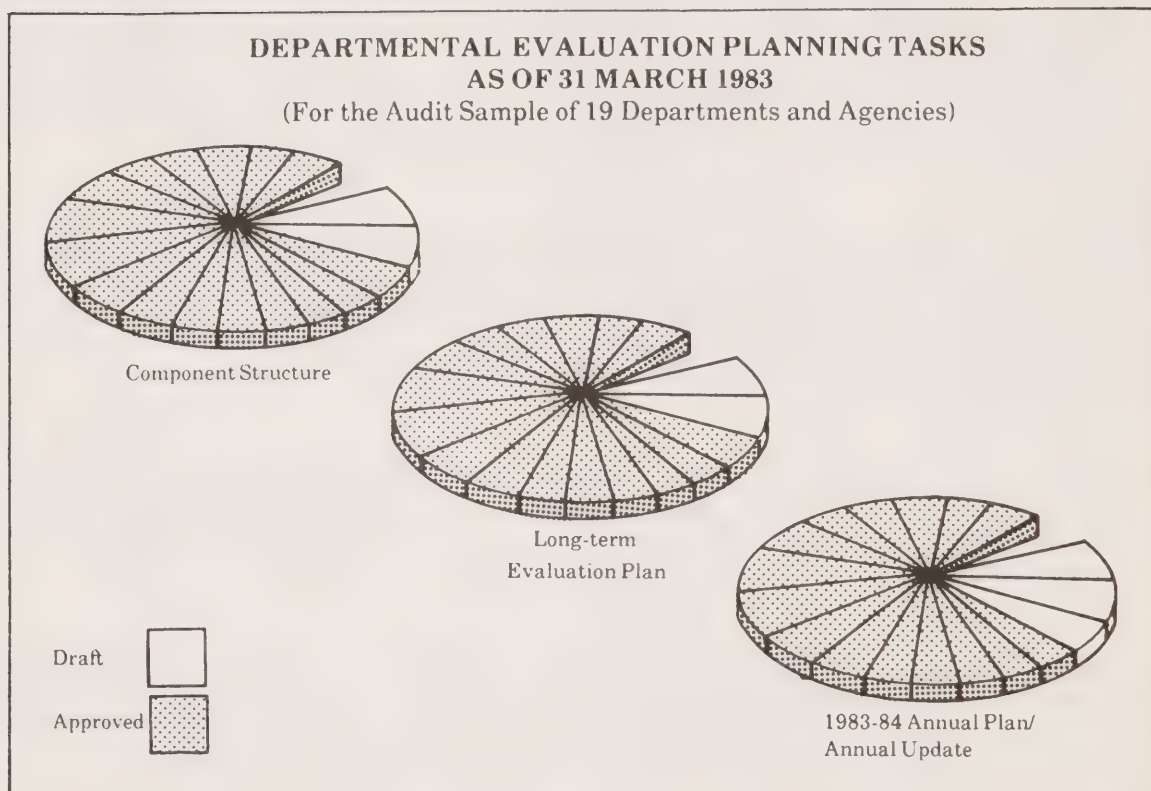
3.80 Evaluation plans should set out departmental evaluation priorities and schedule program components for evaluation accordingly. We found that 16 of the 19 departments had deputy-approved long-term evaluation plans covering all departmental programs. Two departments had developed draft long-term evaluation plans.

3.81 The existence of long-term plans in the majority of the 19 departments covered by our audit is also reflected across the 56 departments and agencies on which the government maintains information. There has been an increase in the number of long-term evaluation plans in these departments and agencies, from 9 in 1980, to 33 in 1983.

3.82 Progress has been made in the completeness and detail provided in long-term plans over the past three years. Long-term evaluation plans have been responsive to change. Specifically, plans have been revised to reflect:

- changing priorities of the deputy head;
- delays in completing evaluation initiatives;
- more realistic expectations;
- work completed to date; and
- revisions to the evaluation component structure.

Exhibit 3.6



3.83 Eighteen of the 19 departments had either approved or draft annual updates for their long-term plans.

3.84 To develop experience and gain credibility, many departments, in drafting their long-term evaluation plans, have chosen to focus their early studies on smaller programs or on the less difficult aspects of larger ones. This was, given the available pool of skills, a reasonable way to proceed. In some cases, this has resulted in deferring the evaluation of large and complex programs.

3.85 Management practices. In addition to examining the organization of program evaluation, we also examined procedures for managing it. Generally, we found these to be consistent with departmental evaluation policies. However, we noted areas requiring further attention.

3.86 As program evaluation plans are implemented, appropriate arrangements need to be made to monitor progress, keep departmental management informed of significant developments and use the information obtained to modify subsequent plans.

- In approximately half the 19 departments, the program evaluation units formally monitor the implementation of their plans and report progress to departmental management.
- Approximately half the departments audited had summarized delays in completing evaluation initiatives and reported this to senior management. The others had not done so.

3.87 Approximately two-thirds of the departments audited have experienced delays in meeting scheduled completion dates for evaluation initiatives. A variety of reasons account for these delays:

- staff shortage, turnover, or lack of suitably qualified staff;
- expansion of scope subsequent to study initiation;
- response to requests for additional work;
- lack of funds for using outside resources; and
- poor or overly ambitious planning.

3.88 The evaluation function is still relatively new and, therefore, it is reasonable to expect that difficulties will be encountered in developing realistic plans and meeting deadlines. We observed improvements in the planning undertaken by more experienced departments.

3.89 In a number of departments, the program evaluation unit was not designated as a separate financial responsibility centre. As a consequence, in some cases, the managers did not know what resources had been expended on the evaluation function. Further, in many units the allocation of resources to specific evaluation projects was not monitored, and managers were unable to provide data on the costs of studies. If managers are to be accountable for their evaluations and exercise proper control and planning with respect to resources, then proper accounts of dollars and time spent must be maintained.

3.90 Departments should ensure that program evaluation managers are given the information needed to keep track of time and resources expended on evaluation activities.

3.91 In many departments, the procedures for maintaining the working papers and documenting evaluations were inadequate. If proper records are not maintained, valuable information may be rendered unusable, lessons learned may be forgotten, and auditing may be more costly than it needs to be.

3.92 Departments should ensure that the documentation for evaluation studies is properly kept and safeguarded.

Program Evaluation Initiatives

3.93 Compared to our 1978 audit findings, departments have made considerable progress in planning and carrying out corporate program evaluations.

- Seventeen of the 19 departments and agencies in the audit have evaluation initiatives in progress. The corporate evaluation units in 15 of these departments have completed at least one program evaluation study.
- Many have completed more. In the audited departments, we observed:
 - 6 completed evaluation frameworks;
 - 119 completed evaluation assessments; and
 - 86 completed program evaluation studies.
- Most of this has been accomplished in the last three years.
- Of the 19 departments and agencies audited, the National Parole Board and the Solicitor General Secretariat had not attempted any corporate evaluation assessments or studies.

3.94 Although the number of corporate evaluations which have been done in a relatively brief period is an important achievement, we identified a number of areas where significant improvements are required:

- The majority of evaluation assessments, particularly the early ones, did not form an adequate basis for sound advice to the deputy for planning the evaluation study. We observed a number of cases where this had resulted in limitations in the study which could be traced to problems or weaknesses in the assessment.

- A substantial number of the evaluation studies had significant weaknesses in the methods used to achieve the work planned for them. This was particularly the case with respect to the measurement of program effectiveness. Approximately half these studies had inadequacies in design sufficient to preclude them from properly attributing results to programs.
- It is important to note that, although many of the evaluation initiatives had limitations, most of the study reports have given some, but not always full, recognition to this.
- We also note that, even in those cases where difficulties were encountered in planning and carrying out assessments and studies, it is often the case that parts of the studies have produced information that is sound and has been found useful by departmental managers.

3.95 Generally, there have been improvements in the quality of evaluation initiatives undertaken in those departments with relatively more experience and in which a trend can be examined.

Type and Extent of Evaluation Activities

3.96 We examined three types of evaluation initiatives: evaluation frameworks; evaluation assessments; and evaluation studies.

3.97 **Evaluation frameworks.** A program profile and an evaluation framework are to be prepared for all new or renewed programs. Frameworks describe how the program will be evaluated and are required by the policy framework to be completed when a new program is designed and implemented or when a renewed program is significantly modified. The purpose is to ensure that the information needed for the evaluation study will be available and that program objectives are clear.

3.98 Information maintained by the Office of the Comptroller General shows that only 17 evaluation frameworks have been completed in 56 government departments and agencies, with an increase from 1 in 1980-81 to 9 in 1982-83. We identified 6 completed frameworks in the 19 departments we audited.

3.99 **Departments and agencies should develop evaluation frameworks in conjunction with the design and early implementation of all new, substantially modified programs, or where appropriate, renewed programs.**

3.100 We selected three evaluation frameworks for audit. Two of these were explicitly requested by Cabinet in conjunction with program renewal, and the third was carried out after the program had been in existence for two years. We found that one of the

frameworks provided only a general discussion of possible evaluation designs and failed to discuss data collection methods. The remaining two frameworks were adequate.

3.101 Evaluation assessments. Assessments involve analysing the program and its environment, identifying the specific evaluation questions to be considered and the extent to which they can be addressed in a study, and developing and costing options for carrying out the study.

3.102 The Office of the Comptroller General's information on 56 departments and agencies shows that 177 assessments have been completed, with a nine-fold increase in the number of completed assessments, from 11 in 1980-81 to 99 in 1982-83. The departments covered by our audit were responsible for 119 assessments. We audited 53 of these assessments in detail.

3.103 Although we found many examples of weaknesses in the evaluation assessments completed, we also observed improvement in the more recent assessments done in most of the departments.

3.104 However, most of the evaluation assessments we examined did not adequately describe program activities and assess them for plausibility in achieving stated objectives. That is to say, they did not examine the extent to which the desired effects could reasonably be expected to result from the activities of the program. If this is not properly done, the evaluation study can be seriously misdirected because resources would be used to measure the achievement of objectives which are not realistically linked to program activities.

3.105 Departments should ensure that program activities are adequately described and their plausibility assessed in evaluation assessments.

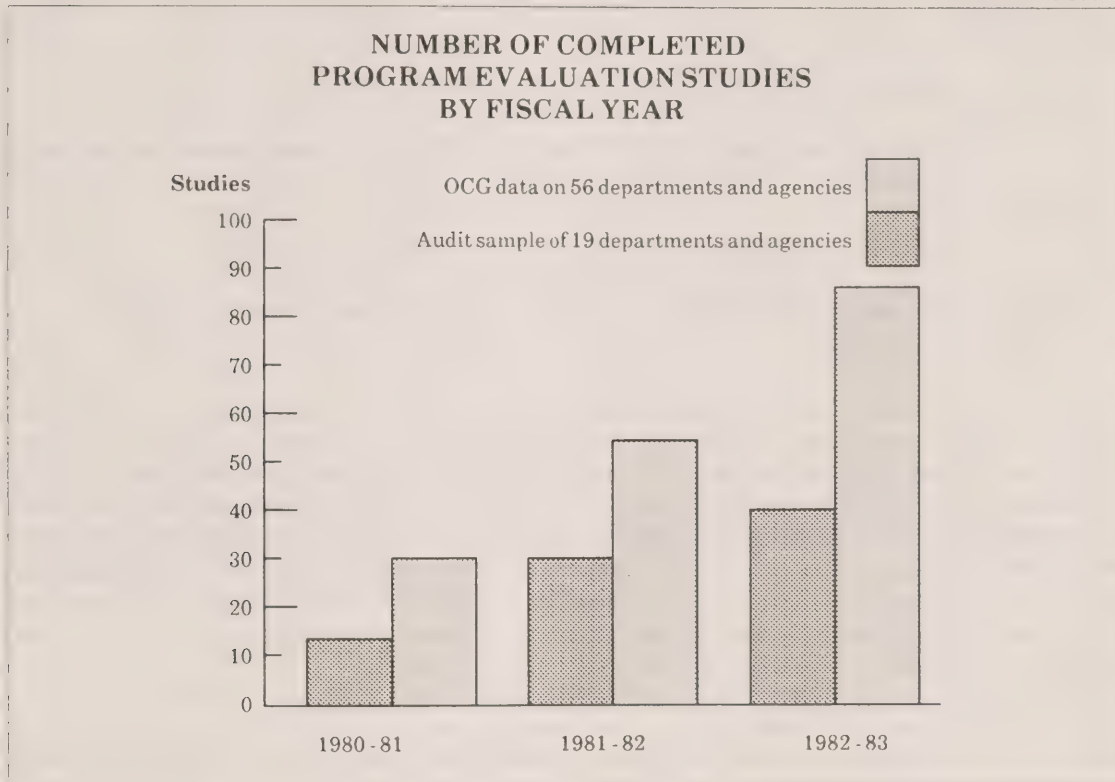
3.106 Many assessments failed to develop an appropriate range of issues into detailed and costed options for the deputy to consider. The result of this was that many studies were narrow in focus and, in some cases, missed key program evaluation questions.

3.107 Departments should ensure that evaluation assessments present an appropriate range of issues, questions and options for the deputy head to consider.

3.108 Evaluation studies. The focus of program evaluation in the government is on the program as a whole, on its impacts and effects, and on the relationships between impacts and effects and the outputs produced, the resources, and the activities undertaken. Program evaluation is intended to address broad issues about the very existence of the program in relation to changing conditions and government objectives. In this way, it is to be different from internal audit which focuses on internal management processes related to program activities and resources.

3.109 Information maintained by the Office of the Comptroller General indicates that 174 evaluation studies had been completed by corporate evaluation units in 56 federal departments and agencies. A major portion of this activity has taken place in the past two years. The number of studies completed by corporate evaluation units has increased from 31 in 1980-81, to 87 in 1982-83. The corporate evaluation units in departments covered by this audit completed 86 studies between 31 March 1979 and 31 March 1983, accounting for approximately 50 per cent of the population of studies identified by the Office of the Comptroller General. (See also Exhibit 3.7.)

Exhibit 3.7



3.110 In the audited departments and agencies that had completed an evaluation study, we reviewed 43 of these studies in depth. These covered a wide range of topics, and most addressed at least one of the four basic program evaluation issues:

- over three-quarters attempted to address program rationale, raising questions about the continuing relevance of or need for the program;
- three-quarters attempted to measure the degree to which the program had achieved one or more of its goals and objectives;
- a similar proportion tried to determine the extent to which the observed changes had occurred as a result of the program; and

- half attempted to assess the degree to which there were cost-effective alternatives to the program.

3.111 In most of those departments where there is a sufficient basis of experience to allow a comparison to be made, we observed significant improvement in the quality of the more recently completed studies.

3.112 We found a variety of problems with many of the studies audited. For example, we observed:

- poorly designed questionnaires;
- many studies using data which were unreliable, incomplete and/or lacking in objectivity;
- many studies inadequately specifying the sample design; and
- samples which were too small for the intended use or biased.

3.113 Most of these methodological problems could be traced directly to planning failures in the assessments. The most notable problems occurred as a result of failure to give sufficient consideration to the design of the study and its relationship to the questions to be answered. Even in those assessments where sufficient planning was done to assess the practicability of the evaluation study options presented, the work often fell short of the level of planning required to carry out a study on the selected option. Further, in some cases, the deputy's committee had designed its own option for which no detailed plan was developed. As a result, before the study was begun, further work would often be required to ensure that the designs selected would achieve what was required of them.

3.114 The impact of these problems was that approximately half the evaluations that attempted to assess the effectiveness of the program were unable to properly attribute the outcomes to the program's activities.

3.115 Before beginning an evaluation study, departments should fully specify the study design for the selected evaluation option.

3.116 To eliminate unnecessary information collection, minimize response burden, and ensure that professional and technical design standards are met, Government policy on information management requires that all new or substantially modified collections of information be approved by Treasury Board and registered in the Inventory of Federal Banks of Information before any field work starts. As part of this process, all proposals for such collections are required to be reviewed by Statistics Canada against information collection standards prior to approval and registration.

3.117 We found that 28 of the 43 studies examined required review, approval and registration under this government policy. However, fewer than half of those required to comply did so.

3.118 Departments should, as required, ensure that all proposals for new or substantially modified data collections, forming part of an evaluation study, are assessed by Statistics Canada and approved and registered by Treasury Board.

3.119 In addition to problems related to collecting primary data for evaluation, we found that approximately 80 per cent of the studies relied to a significant degree on administrative data. In doing so, many of these studies encountered problems because these data were incomplete, inaccurate, or poorly stored. Often data which would have been of great value in assessing program effectiveness and which could have been gathered at small marginal cost were not being gathered. Such data often represent the only practical way to assess with any precision the impacts which a program has had on its clients. Accordingly, these data bases should be given close attention well before they will be needed for program evaluation purposes. Additionally, if these data bases are well developed, the information in them will often be of great value to the line managers responsible for running the program. Where appropriate, evaluation frameworks could serve as an important means of identifying areas where such data can be developed.

3.120 If the evaluation function is to develop, it will require staff who have proper qualifications and experience. This includes persons knowledgeable about government procedures and trained in program evaluation. This combination is rare. We observed a number of evaluation units where there is an insufficient number of staff with program evaluation knowledge and skills.

3.121 The Office of the Comptroller General, in conjunction with departments and agencies, should develop and implement a plan to ensure an adequate and continuing supply of qualified evaluators.

3.122 Departments should take steps to fill available positions with more qualified program evaluators, and enable staff to take the training necessary to upgrade their skills to a reasonable level.

Report Quality

3.123 Although the design and conduct of evaluations may involve constraints and compromise in the methods used, the evaluation study report should be complete and accurate in describing the study implementation, limitations and results. Given the developing nature of the evaluation function, evaluation reports should fully document procedures so that future efforts can build on the experience and the information obtained.

3.124 Most of the study reports attempted to explain how the problems and limitations of the study affected the findings and the conclusions to be drawn from them. However, some failed to do so in a way which informed readers of significant qualifications on the results. In a small number of the studies, the findings were not presented in a sufficiently accurate and balanced way.

3.125 Where study reports do not present balanced and accurate findings, with the limitations discussed and conclusions appropriately qualified, there is the danger that the information presented may be misleading to management.

3.126 Departmental evaluation units should ensure that evaluation reports fully present study findings in a balanced manner and discuss the implications of limitations in the methods used for the interpretation of the findings.

Reporting and Using Evaluations

3.127 **Departmental reporting.** Deputy heads are the principal client for evaluations, and evaluation studies should be reported to them. Program managers, themselves decision makers, should also be provided with evaluation reports.

3.128 We found that, in almost all instances, evaluation reporting has followed procedures set out in the departmental evaluation policy. All departmental policies require reporting to the deputy, and nearly all require reporting to other responsible levels of program management. Instances of failure to report evaluations have been infrequent, and steps have been taken to ensure appropriate reporting.

3.129 **Annual reports.** Departmental annual reports serve to communicate the nature of departmental activities to Parliament and, more broadly, the public.

3.130 In its review of the 1978 audit, the Public Accounts Committee recommended to the government that "annual reports of departments contain non-technical summaries of effectiveness evaluations to highlight the impact of government programs."

3.131 We found only two departments whose annual reports had summaries of completed evaluations. Even in these cases, however, only the focus of the studies was described, not the findings. Several other departmental annual reports have mentioned that particular studies had been completed or were under way.

3.132 **Other public reporting.** The Public Accounts Committee also recommended that:

technical reports of effectiveness evaluations be available for critical review and comment and in particular, your Committee encourages review in learned journals in order to focus the informed commentary of the academic community on the technology of evaluation research.

3.133 Only in a few departments did we find a concerted effort to make evaluations available to the public. One department maintains an evaluation resource centre of completed studies and evaluation literature for use by persons both inside and outside the department and has distributed a large number of its evaluations on request. Four others have published information on some of their evaluations in a Statistics Canada journal of government survey activity.

3.134 The situation varied in the remaining departments. Some claimed that evaluations were available to the public on request. In most of these cases, there were few, if any, known requests, and the departments had done little to make known the availability of particular studies. Other departments maintained that these documents are for use only by the department.

3.135 The government should ensure that annual reports of departments contain non-technical summaries of program evaluations.

3.136 **Strategic Overviews.** The Policy and Expenditure Management System emphasizes Cabinet committees' decision-making and their role as evaluation users. The concerns of Cabinet committees are to be taken into account in planning evaluations. A summary of the findings of program evaluations and the changes proposed as a result of these findings are to be reported, where appropriate, to central agencies and Cabinet committees by means of the annual Strategic Overview. This reporting is meant to indicate briefly what the department considers significant about its evaluations and the actions taken or to be taken in light of them as they relate to the themes indicated in the Overview.

3.137 The Strategic Overview serves as a direct communication from the departmental minister, over whose signature the document is issued, to colleagues within the Cabinet committees. This type of reporting also helps forge a link between the evaluation function and the departmental strategic planning function. With this link, strategic planning can become an important user of evaluations.

3.138 We found that few of the audited departments reported findings of any evaluations in Strategic Overviews.

3.139 Departments should report in Strategic Overviews, when appropriate, the findings of evaluations and the changes proposed as a result of them.

3.140 Use of evaluations. In discussing the use made of evaluation studies, it is important to recognize the difficulty involved in determining the extent to which program decisions were influenced by the results of an evaluation study. A program evaluation finding or recommendation is seldom the sole factor influencing decisions.

3.141 We reviewed whether recommendations were made as a result of evaluations, whether they were considered for approval by deputies, and whether implementation plans were developed for approved recommendations. We also interviewed several deputy ministers about their views on the usefulness of information produced by evaluations.

3.142 The deputy ministers reported that they had found most of their evaluations to be useful, although they said that some had been more useful than others. Given the newness of program evaluation in most of their departments, the majority believed that it was too early to determine how cost effective program evaluation could eventually be.

3.143 In all but three of the studies we audited, recommendations had been made in the reports. In almost all cases, a decision was made by senior management to accept some or all the recommendations in completed evaluation studies. Where this was not done, it was usually because the evaluation was too recent for decisions to have been made.

3.144 In approximately one-half of the evaluations in which some or all recommendations were accepted, the department had prepared an implementation or action plan.

3.145 The recommendations coming out of the 43 audited evaluations fall into four broad categories which sometimes overlap. They involve changes in program size, program design and support operations, and the undertaking of further effectiveness studies, or developing effectiveness monitoring systems.

- *Changes in program size.* Most of the evaluations did not recommend a change in program size. Only six recommended expanding the program, and three recommended reducing the program.
- *Changes in program design.* Almost all studies made some recommendations to change aspects of program design. Among these recommended changes were those having to do with adding new program aspects, altering existing features and shifting emphasis from one part of the program to another.
- *Changes in support operations.* Nearly all evaluations made recommendations for changes in support activities related to the program, such as changes in staffing levels or organization.
- *Further effectiveness information.* Over one-third of the studies recommended that additional data on program effectiveness be gathered either through further studies or ongoing monitoring systems.

Government-wide Program Evaluation Issues

3.146 As noted previously we have used the program evaluation guidelines issued by the Office of the Comptroller General as a basis for expanding and elaborating on the audit criteria developed by our Office for our 1978 study. The Office of the Comptroller General has published these detailed guidelines for organizing, planning and conducting evaluations to give direction to departments in establishing a program evaluation function. In our opinion, this policy framework represents a reasonable standard for departments to strive to meet.

3.147 The implementation strategy followed by the Office of the Comptroller General involved an initial emphasis on establishing evaluation units in the major departments and agencies and on encouraging these departments to conduct evaluations, even of a limited nature. In our opinion, this has been a reasonable way in which to proceed.

3.148 As we observed earlier, the Office of the Comptroller General is becoming increasingly concerned with the focus and quality of the evaluation studies being carried out by departments and agencies. To this end, it issued the *Principles for the Evaluation of Programs by Federal Departments and Agencies* to give guidance to departments with respect to what would be required in a satisfactory program evaluation initiative – assessment and study. These represent important benchmarks against which the quality of an initiative can be assessed.

3.149 The responsibility for monitoring, on behalf of the Government, the extent to which the studies carried out by departments represent work of adequate quality and objectivity is assigned to the Office of the Comptroller General. However, in the early stages attention was focused primarily on the establishment of program evaluation functions and encouraging departments to attempt evaluations. Recently, the Office of the Comptroller General has been involved in more extensively challenging the information being produced by program evaluations. If program evaluation is to continue to develop, a strong central monitoring and quality assurance function will be required, both to support departmental efforts as well as to ensure the integrity of program evaluation information.

3.150 The Office of the Comptroller General should further develop the central monitoring and quality assurance function for program evaluation.

Interdepartmental Evaluation

3.151 The current policy framework for program evaluation has the department and the deputy head as the central focus of program evaluation activity. However, many important programs are delivered in a way that involves more than one department. Further, the basic structure of the Program and Expenditure Management System stresses the interdepartmental nature of program decision making.

3.152 We identified a minimum of 17 interdepartmental programs in the 19 departments included in the audit. It is evident from our review that some interdepartmental programs involve large expenditures and some are of broad public concern. For example, the Industrial and Labour Adjustment Program, which involves CEIC, Labour and DRIE, has been allocated \$450 million to be spent from 1981-82 to 1984-85. The parole program, in addition to having a significant impact on the lives of inmates of Canadian prisons, also has important implications for the well-being of the general public. Other interdepartmental programs identified include CHIP (Canadian Home Insulation Program), involving the Canadian Mortgage and Housing Corporation and Energy, Mines and Resources; National Search and Rescue, involving the Departments of Transport, National Defence and Fisheries and Oceans; and Recruitment and Selection of Immigrants, involving Employment and Immigration and External Affairs.

3.153 Although present policy and guidelines recognize that interdepartmental programs exist, they fail to specify procedures to be followed in conducting evaluations of them.

3.154 Although a few initiatives to evaluate such programs were being taken, the practice was not widespread. In most departments, interdepartmental aspects of programs were not recognized in either the component profiles or the plans for evaluation. In many cases, when asked about this, heads of program evaluation units expressed concern or uncertainty as to how they should proceed and what their responsibilities were with respect to such programs.

3.155 A key problem in interdepartmental evaluations lies in identifying the position or committee accountable for the overall management or co-ordination of the program, the party who would then appropriately be the client for the study. An example of this can be found in looking at the implementation of the Parole Act.

3.156 The objectives of the parole program are found in the Parole Act (Section 10(1)): "(ii) the reform and rehabilitation of the inmate will be aided by the grant of parole, and (iii) the release of an inmate on parole would not constitute an undue risk to society." The program to accomplish these objectives is delivered primarily by the National Parole Board and The Correctional Service of Canada.

3.157 As part of our 1978 audit of the National Parole Board, we reported that an effectiveness evaluation of the federal parole system had not been conducted. We have followed up on progress in evaluating the parole program. Consistent with their areas of responsibility, both the National Parole Board and The Correctional Service of Canada still plan to evaluate only their respective intra-agency activities related to the parole program.

3.158 Evaluation approaches adopted by these two agencies, although they may be appropriate to their individual needs, do not seem to address the relationships of these particular activities to accountability for the overall effectiveness of the program. The

legislative mandate for the parole program does not specifically identify who is to be held accountable for achieving these overall objectives or for evaluating the program. As of 31 March 1983, we found that no evaluation of the parole program had been conducted, although a related study of the program has been carried out by the Secretariat of the Department of the Solicitor General.

3.159 The Solicitor General Secretariat is responsible for co-ordinating policy development with the agencies as well as for improving policies and programs in the criminal justice system. The Secretariat has, in the past, conducted studies and evaluations on "programs" and legislation which cut across many organizations. Given the inter-agency nature of its responsibilities, the Secretariat may be the appropriate party to conduct or co-ordinate the evaluation of the overall effectiveness of the parole program, with the agencies continuing to evaluate their respective areas of responsibility.

3.160 The consequence of problems of this type is that interdepartmental programs are not systematically being subjected to the same type of orderly review and evaluation as those programs administered wholly within single departments and agencies. As these programs are often very major ones, this means that important activities risk not being evaluated.

3.161 The Government should ensure that departments and agencies identify the interdepartmental dimensions of their programs in their component profiles. The implications of these interdepartmental dimensions, both for the effective operation and the evaluation of the program, should be examined in assessments and frameworks.

3.162 The Government, in creating or renewing interdepartmental programs, should identify an organization responsible for evaluating the program. In doing this, the Government should identify who is accountable for the overall management of the program and, therefore, who is the client for the program evaluation.

3.163 With respect to existing interdepartmental programs, the Government should establish improved procedures to ensure that these programs are identified and periodically evaluated, where it is reasonable and appropriate to do so.

Small Agencies

3.164 The current policy framework requires that all departments and agencies establish a full evaluation infrastructure. However, in smaller agencies, it may not be cost-effective to establish an internal capability to plan and carry out program evaluations.

3.165 As noted earlier, we found that most of the agencies which had not developed an infrastructure for evaluation were among the smaller agencies. As part of its implementation strategy, the Office of the Comptroller General has only recently given full attention to the place of program evaluation in these agencies.

3.166 The Government should determine appropriate ways to develop a program evaluation capability for smaller entities.

Crown Corporations

3.167 One of the vehicles which the Government employs to achieve its public policy objectives is the Crown corporation. In Chapter 2 of our 1982 Report, we stated that although the corporate form, like tax expenditures, grants and contributions, or direct departmental intervention represents a means to achieve public policy objectives, the implications for the Government and Parliament in terms of direction, control and accountability are quite different.

3.168 Within the 19 departments and agencies we audited, we observed instances in which Crown corporations were being used by the Government to assist the departments to achieve their program objectives, and where funds flowed to these corporations through the departments' Estimates. In these circumstances, we would have expected that the departments would have made plans to evaluate the effectiveness of these expenditures. We found that the departments had not planned to evaluate the effectiveness of this public policy vehicle in their program evaluation plans.

3.169 Information maintained by the Comptroller General shows that, as of 31 March 1983, five Crown corporations were developing a program evaluation function within the Government policy framework in order to evaluate the achievement of their public policy objectives. We have been informed that, in four of the five cases, the client for the evaluation function in these corporations will be the chief operating officer of the corporation.

3.170 Last year, in paragraph 2.116, we recommended that:

Crown-owned corporations should report to Government on their plans, performance and achievement of goals. Government should set out such reporting requirements and ensure that reports are prepared as and when required. Parliament should be made aware of the reporting requirements and should have the opportunity to evaluate periodically these reports and consider them when considering changes in mandate or objectives of the corporation and relevant legislative, expenditure and other government proposals.

3.171 The Government's policy framework on program evaluation represents a reasonable approach to the evaluation of the performance of Crown corporations. One of the

important first steps in implementing this would be to identify and clarify the public policy objectives of these corporations.

3.172 The Government should establish procedures to ensure that the public policy objectives of Crown corporations are evaluated and that the results are reported, when appropriate, to the Government and Parliament.

Reporting to Parliament

3.173 The revised Estimates are designed to provide Parliament with better information on the operations of government programs, including performance information on results. The specific medium for this information is the Program Expenditure Plan or Part III of the Estimates. In our view, Part III would be an appropriate place to present to Parliament the findings of program evaluations.

3.174 The Office of the Comptroller General should ensure that Part III of the Estimates refers to and incorporates the findings of evaluation studies that are pertinent to program performance and resource management.

Parliamentary Tabling

3.175 In its review of the 1978 Auditor General's Report, the Public Accounts Committee recommended to the House that all effectiveness evaluations be tabled in the House of Commons within 60 days of their completion. The government responded, through the President of the Treasury Board, that:

With enactment of the Access to Information Bill as currently proposed, and approval of a draft Treasury Board policy on the documentation of program evaluation studies, such information would be publicly available. Some procedure, perhaps tabling of evaluation reports within 60 to 90 days of their completion by the responsible Minister, will have to be established to ensure easy access by Members of Parliament.

3.176 On the basis of our audit work, we found that one program evaluation report has been tabled in the House.

3.177 The Access to Information Act was proclaimed on 1 July 1983.

3.178 The Government should establish procedures to ensure that the recommendation of the Public Accounts Committee with respect to tabling program evaluation reports is acted on.

**THE MANAGEMENT OF COMPUTING
IN THE FEDERAL GOVERNMENT**

THE MANAGEMENT OF COMPUTING IN THE FEDERAL GOVERNMENT

Table of Contents

	Paragraph	Page
SYNOPSIS	4.1	135
Introduction	4.10	137
Scope of the Study	4.19	139
Observations and Recommendations		
Computer Systems Development	4.24	142
Acquiring EDP Facilities	4.53	149
EDP Security: Disaster Preparedness	4.78	154
Managing EDP Personnel	4.90	156
Strategic Planning for EDP	4.119	162
The Role of Treasury Board	4.131	165
Exhibits		
4.1 Full EDP Costs in the Federal Government		138
4.2 Changes in Price and Performance of Large-scale Processors, 1952-1979		140
4.3 Departments and Topics Selected		143

THE MANAGEMENT OF COMPUTING IN THE FEDERAL GOVERNMENT

SYNOPSIS

- 4.1** The government's activities are now highly dependent on the computer.
- 4.2** The 1982-83 EDP expenditure was \$610 million annually and has increased very little, in constant dollar terms, in the last five years.
- 4.3** Most government electronic data processing (EDP) is based on the conventional technology of the 1970s. We examined these conventional EDP activities to see whether they provide a base from which the government could go on to make selective and appropriate use of the new microprocessor and telecommunications-based EDP technology of the 1980s and thereafter.
- 4.4** All the aspects of the government's conventional EDP activities which we examined offered opportunities for improvement. Looking to the future, moreover, we saw signs that bring into question the government's ability to take prompt and full advantage of the new technology.
- 4.5** Availability of expertise for new systems development is limited by the need to devote an ever-increasing proportion – now about 70 per cent – of the present development staff to maintaining and making incremental improvements to the large body of existing applications. Furthermore, there was a shortage of experienced EDP personnel until last year, and it is likely to return. Three to four-year backlogs of new systems development can be found in many departments.
- 4.6** Adequate methodology for developing systems exists in most departments, but it is often not followed. We observed some overruns on development costs and many late deliveries. Management controls over system development, such as project cost accounting systems, need improvement.
- 4.7** One especially difficult problem in systems development seems to be that of establishing user needs and settling on firm specifications, particularly in small departments or those inexperienced in EDP. Similarly, improvements are required in the way departments establish the EDP equipment needs of their programs and determine priorities for meeting these needs. Both these problems relate back to the fundamental requirement for strategic planning for EDP. Strategic planning is essential to meeting long EDP lead time requirements, but few departments have been able to forecast their requirements far enough ahead to do such planning effectively.

4.8 With a few exceptions, departments are not in a position to operate at alternative sites if a main computer site is out of action for a lengthy period.

4.9 Treasury Board's policies and guidelines for managing conventional computing activities appear to provide a framework adequate to control and direct today's EDP activities, but they may need some revision and extension to meet the needs of the next few years.

Introduction

4.10 Computers are now an indispensable feature of the government's operations. In the 25 years since their introduction, their use has grown to the point where such critically important programs as income tax collection, analysis of census returns, and payment of family allowances and unemployment insurance benefits all now depend on the computer. The day is long past when returning to manual systems could be contemplated, even in an emergency.

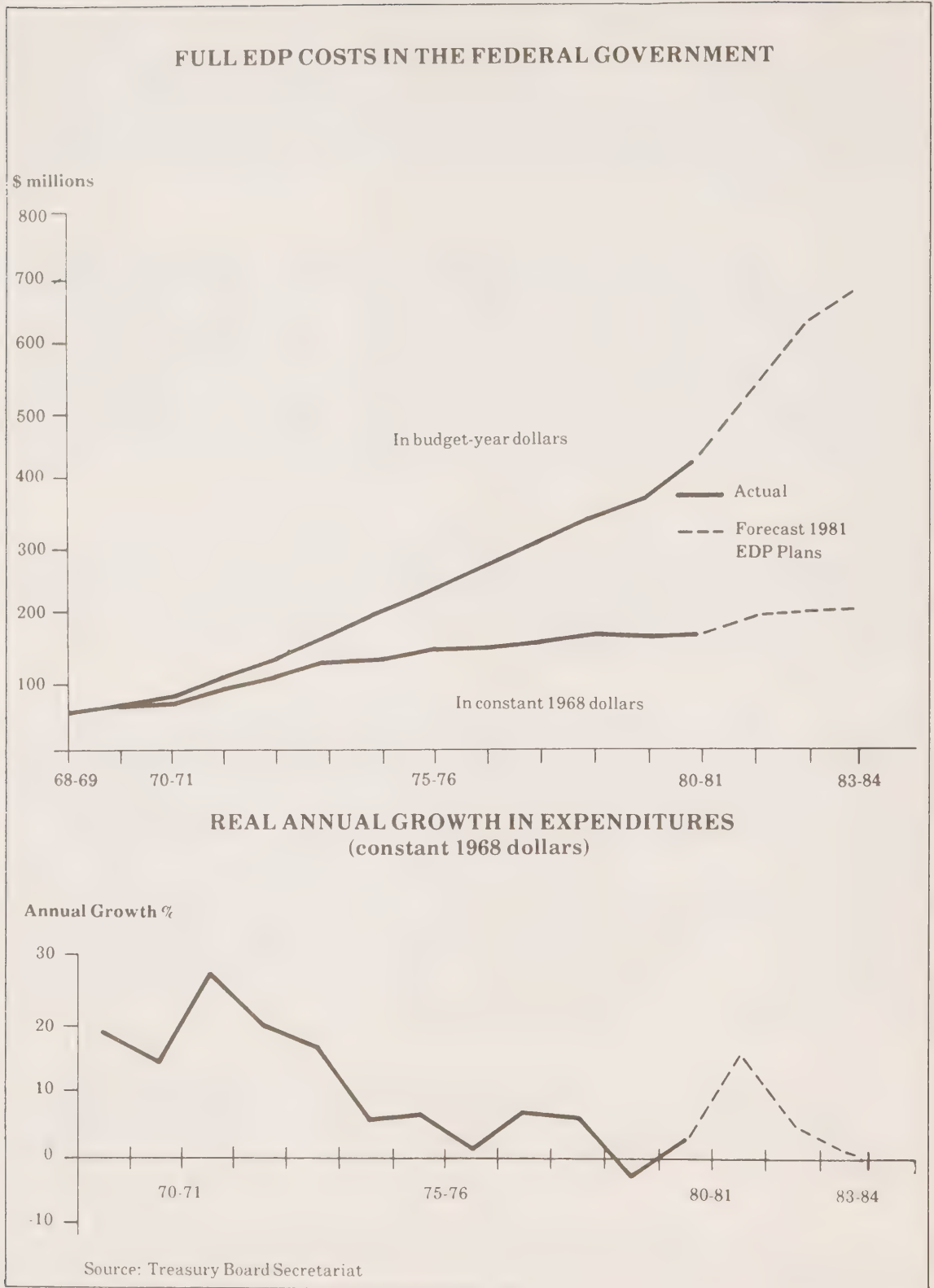
4.11 Treasury Board estimates the outlay in 1982-83 to support electronic data processing (EDP) in the federal government at about \$610 million and the number of person-years primarily engaged in EDP at close to 10,000. These figures, and similar ones elsewhere in this chapter, reflect only what is called general-purpose computing; they exclude computers dedicated to particular scientific experiments and cases where the computer is wholly integrated to some larger equipment complex; for example, military weapon systems, and air traffic control. The figures, moreover, do not show the full importance of computing in government affairs. Today, the great majority of government employees handle data processed by computer in doing their daily work.

4.12 The scale and pervasiveness of computing activities in the government make them intrinsically worth examining. A number of recent developments in the EDP field, moreover, prompt particular attention at this time. New advances are occurring almost daily in microelectronic technology, advances that increase the speed and reliability of computer hardware while reducing its cost.

4.13 At the one extreme, "personal" computers are now available for a few thousand dollars; at the other, large scale processors handle millions of operations per second at ever-reducing unit costs. New devices and software make it possible to interconnect terminals and micro-computers to each other and to central computers. Advances are being made in the management and accessibility of large files of information. New languages are being produced which make it easier to define and program new applications. We appear to be on the verge of a new wave of computer applications, among them the automation of office processes fundamental to the apparatus of government. This new technology offers real opportunities to improve the efficiency of the government's operations and to serve the public better. The fundamental question is whether the present state of EDP in the government, and the initiatives now being taken, will permit the government to take advantage of the new technology of the 1980s and thereafter.

4.14 A not wholly conclusive, but perhaps significant, indication of the way EDP is developing in the government is provided by the Treasury Board's data on government expenditure on EDP. These data are shown graphically, in current and in constant dollars, in Exhibit 4.1.

4.15 This Exhibit indicates that, in the late 1960s and the early '70s, the federal government's current dollar expenditure on EDP was growing at an annual rate of about 20



per cent. By the late '70s, however, this rate had declined to about 8 per cent. With inflation taken into account, therefore, the real rate of growth was small or even, in one year, negative. Although recent data suggest that the real rate of growth may again become positive this year, the overall picture indicates that EDP's fraction of the total government budget for internal services has stabilized.

4.16 Some provincial governments – notably Ontario – appear to be increasing their EDP budgets at rates much faster than that of the federal government. This difference may, of course, just mean that federal EDP is nearer to "maturity" than is that of the provinces; new major applications, of a sort developed at the federal level years ago, may still be coming into service provincially. To decide whether this is so, we would have had to make a much more detailed analysis of provincial computer activities than it was possible for us to undertake.

4.17 Taken alone, therefore, the rates of growth of EDP expenditure do not provide clear evidence that computerization is slowing in the federal government while it accelerates elsewhere. An impressive volume of development work is still in progress. Nearly all EDP managers we interviewed, however, told us that a large and increasing proportion of their development staff was now tied up in maintaining existing systems. Also, the major projects we looked at seemed usually to be elaborations of existing systems, rather than new designs or "from the ground up" replacements. In the field of office automation, moreover, initiatives in the government are still preliminary and tentative; they do not yet represent large expenditure. In general, EDP managers appeared to be using their resources to consolidate existing systems rather than to exploit new technology. In doing so, they may act wisely, but we believe it is also important that sufficient effort be made to keep the new technology option open for the government.

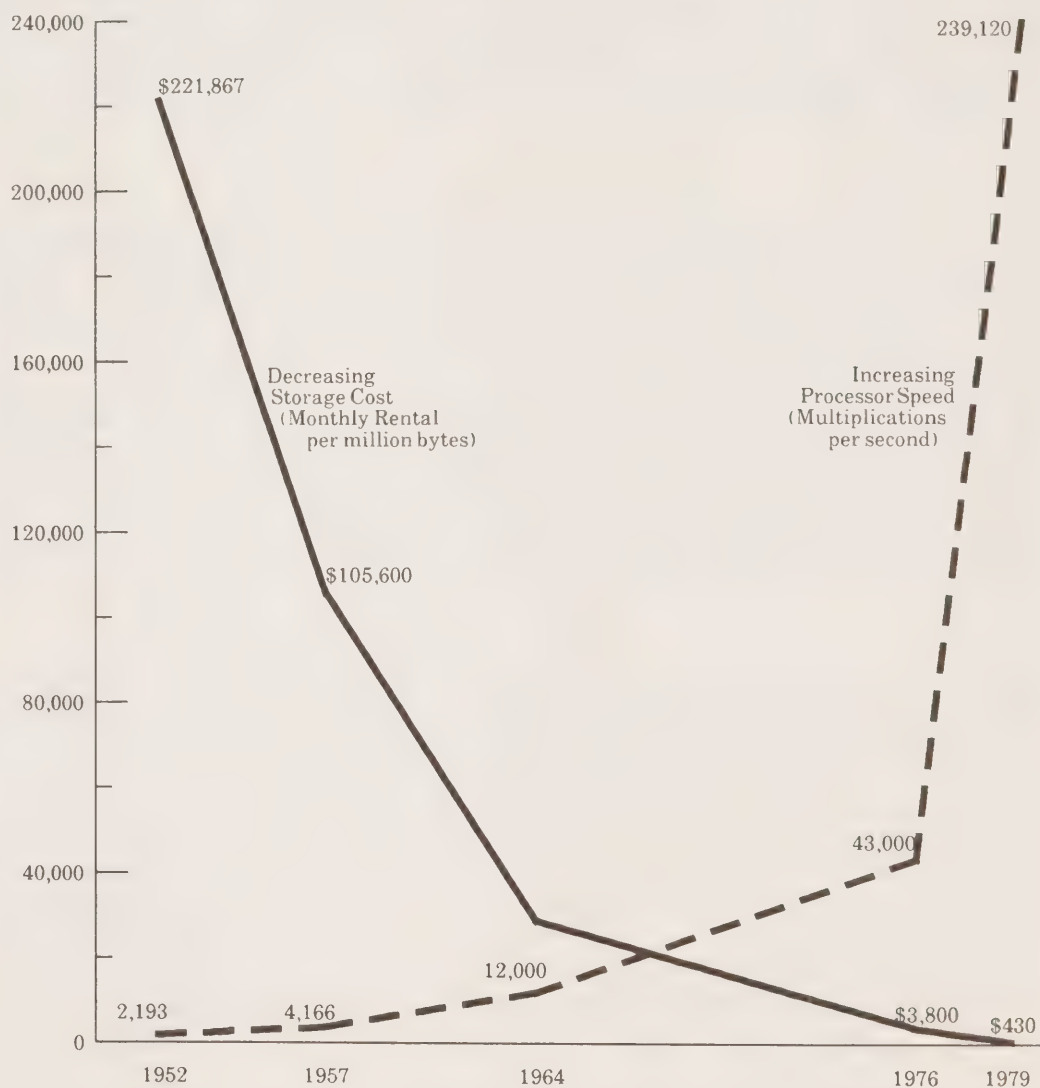
4.18 There is some evidence, therefore, that, despite the very great decline in the hardware costs of data processing illustrated by Exhibit 4.2, a point may be approaching at which computerization within the federal government will be limited, by financial restraints, to rates of development that would leave the government far behind the private sector, and even behind some other governments. It is not within our province to recommend that expenditure on EDP should be increased: other priorities may prevail. The shortage of funds and expertise might be relieved by re-deployment of resources already allocated to the departments or, in some cases, already in the hands of the EDP organizations. In any case, we believe it is proper for us to draw to the attention of Parliament and the public some of the implications of leaving government EDP more or less the way it is. Our study shows, we believe, that those implications could be fairly serious; and, inevitably, some of the problems are related to the availability of resources.

Scope of the Study

4.19 This study can be regarded as one of a continuing series of examinations of various aspects of electronic data processing in the federal government, a series which began with the Computer and Information Systems Evaluation (CAISE), reported in 1977.

CHANGES IN PRICE AND PERFORMANCE OF LARGE-SCALE PROCESSORS 1952-1979

Cost or Speed



Source: Treasury Board Secretariat

Computing services activities in individual departments and agencies are examined in the course of their comprehensive audits.

4.20 The primary purpose of this study is, therefore, to assess the extent to which the federal government is demonstrating due regard for economy and efficiency by ensuring that it will be in a position to make selective and appropriate use of the computer technology becoming available to it in the 1980s and 1990s. In particular, the study concentrates on the present state of EDP in the government, and enquires whether certain essential pre-conditions are being met for any believable program for making the most effective use of the technology of the next 10 to 15 years.

4.21 What are the pre-conditions? Many could be suggested, but we believe that any sustained program of computerization in the '80s would need to rest on at least the following foundation points, which must now be in existence:

- demonstrated ability to manage the systems development process, to build (or otherwise acquire) systems on time and within budget;
- processes for acquiring computer equipment that ensure that, in making the acquisition, senior management gives full and informed attention to value-for-money considerations;
- due attention paid to the increasing dependence of departments on their computers, shown by intensified preparedness to continue operations should a computer site be made inoperable by a disaster;
- a core of expert EDP managers and technical people, with effective means at hand for recruiting and training more of them, in the face of the highly competitive sellers' market for such expertise anticipated as the economy recovers;
- long-range EDP planning processes, capable of dealing with the long development lead times now characteristic of EDP; and
- government-wide policy and direction adequate to articulate all these processes and to provide the leadership and co-ordination needed to get under way a worthwhile program of research, pilot projects, etc., directed toward judicious adoption of the new technology.

4.22 We therefore looked for the existence of these pre-conditions. Each of the resulting six investigations is reported in one of the following sections of this chapter, along with recommendations designed to suggest ways in which the government can prepare itself to take advantage of the new computer technology.

4.23 To conduct the study, we examined the activities of a sample of government departments in each of the topic areas. Our findings are drawn largely from interviews with

EDP and user managers supplemented by documentation reviews where the overall scale of the study permitted. In deciding which departments to interview in respect of each topic, we tried to make a selection balanced with respect to such variables as the size and nature of the department's EDP operations, their geographic distribution, and the degree of centralization of EDP organization. Our selection of departments, grouped according to the topics studied, is displayed in Exhibit 4.3. Additionally, we drew on the findings of departmental comprehensive audits, both those of recent years and those being reported this year. We also visited the central agencies concerned with EDP.

Observations and Recommendations

Computer Systems Development

4.24 In an EDP system, people, computers and telecommunications interact to process raw data into meaningful information – information which in turn forms the basis for decision and action. Introducing such a system requires much more than just designing the system, selecting computer equipment and programming it. The working procedures of hundreds or even thousands of people may be fundamentally affected, so that there will be complex, new clerical procedures to be devised, manuals to be written and extensive training to be done. Existing data will need to be converted to computer-readable form and organized to provide for efficient access to it by the computer. Costs of such systems vary widely, from a few hundred thousand dollars to 10 or even 20 million dollars. Typically, the development process requires six months to three or four years, and sometimes more.

4.25 We focused on three principal aspects of the system development process in government:

- We tried to assess the ability of departments to deliver the system needed by the user on time and within budget.
- We attempted to measure the backlog of development work facing the development "shops" in the departments, since if the conventional backlog were very large, few resources would be available to exploit the new technology.
- We asked whether departments are ear-marking the resources – people and money – needed to prepare for the new technology.

4.26 We concentrated on the larger systems that run on large or medium-scale "mainframe" computers. We left aside the problems of developing systems for the very small "personal" computers now coming on the market. We did this because most of the development effort and money are still going into these larger systems.

4.27 **Management of the systems development process.** Treasury Board guidelines prescribe fairly detailed project management procedures, and computer literature is well developed in this area. Most departments we visited had, in fact, adopted a

DEPARTMENTS AND TOPICS SELECTED

Department \ Topic	1. Computer Systems Development	2. Acquiring EDP Facilities	3. EDP Security: Disaster Preparedness	4. Managing EDP Personnel	5. Strategic Planning for EDP
Communications	X	X		X	X
Customs and Excise	X		X	X	X
Employment and Immigration	X	X	X		
Environment	X		X		X
Indian Affairs and Northern Development	X	X	X		X
Labour				X	X
National Defence		X			
National Library	X	X			S
National Research Council		X			
Statistics Canada	X	X	X	X	X
Supply and Services (Services)	X		X	X	X
Transport	X	X	X	X	
Veterans Affairs	X		X		S
S = material drawn from interviews on other topics was used in connection with the Strategic Planning topic					

formal system development "methodology". Such a methodology prescribes rigorous standard practices for managing projects. It imposes on the project team a disciplined, step-by-step progression through well defined stages in the life of the project, and requires stringent reviews at clearly defined milestone points, to ensure that what was supposed to be delivered at the milestone was delivered. When coupled with tight program documentation standards, such a methodology will do much to enhance management's control of the systems development process.

4.28 In actuality, however, we found great variation in the degree to which development teams observe the rules of their methodologies. Many of the problems we observed would not have occurred or would have been greatly reduced if the department had followed its own methodology. Why, we asked, was that not happening? We thought we could throw light on this question by examining certain basic problems that the manager of a computer system development project must solve, in the particular context of the project. In the 10 departments we visited in this part of our investigation, we tried to find out how project managers were, in fact, dealing with these problems.

Problem 1: **How can managers define the user's needs and reflect them in the system's design?**

4.29 Most development managers seem keenly aware of the need to meet the user's requirements and to ensure that the user understands how to make the system work. To do this, the project team will often include user personnel along with EDP professionals. Indeed, even the project manager is now sometimes a user, with no technical EDP background. Despite this improvement in user involvement, users still complain that they are asked to sign off, in haste, on specifications they cannot understand. The developers reply that the users do not know what they want and that the system specifications are continually changing. This sort of bickering is also to be found in the history of private-sector systems. The severity of its effect in a government setting is increased, however, by the almost universal practice of having development costs charged to the budget of the EDP manager. The user has little incentive to be moderate, therefore, in demanding convenience features in the design, or in insisting on design changes while the system is under development. For these reasons, the system finally developed is often vastly more complex and costly than that originally proposed.

4.30 There is no easy solution to these problems. The users can usually argue convincingly that rapid changes in departmental policies and practices preclude a design "freeze". The EDP management, much as it would like to see the user pay for being "choosy", would be most unwilling to lose control of development funds to users, and thus become dependent on them.

Problem 2: **How can project managers control their projects?**

4.31 With a continually shifting design, managers have to act with great determination if they are to maintain control of projects. To do so, they must construct and

keep up to date a project plan, to which they must carefully compare actual progress, as the project goes ahead.

4.32 The managers we interviewed found it very difficult to do these things. Most of the projects we reviewed had inadequate plans, lacking in detail and long out of date; obviously, the plans were not being used as a management tool to control the project. What seemed to be lacking was the ability to re-plan quickly and effectively, to take account of specification changes and departures from the original plan in timetable and expenditure. Such planning tools as were available simply could not cope with the iterative planning – planning and re-planning – necessary to maintain project control in a rapidly changing context.

4.33 Nevertheless, we believe that, if given the incentive provided by a systems development process much more visible to senior management than it is today, project managers would develop the planning tools required to do the sort of iterative re-planning required. In a private-sector software development firm, such tools are a prime requisite if the company is to meet its contracts and stay in business. The recommendations we make later on seek to induce, in government in-house software projects, a somewhat similar environment and, with it, a greater incentive to plan – an incentive that is usually lacking today.

4.34 No matter how expert planners they are, however, project managers must still be able to get reliable feedback from a project monitoring system which tells them whether they are meeting their objectives on time, on specification, and within budget. Problem 2, therefore, leads to Problems 3 and 4.

Problem 3: In particular, how can managers control project costs?

4.35 Most EDP professionals concede that estimating the cost of a proposed large and complex system is one of the most difficult tasks of their trade. This is especially so where no earlier EDP system now performs the function, where transaction volumes are unknown, and where user needs are ill defined and subject to the escalation process described above. In the private sector, management's initial approval is normally sought, not for the whole project, but just for a reasonably detailed design which can then be costed with some confidence. A second approval, to proceed with the project itself, is then asked of a properly informed management.

4.36 In the government setting, however, such a two-stage process – or anything like it – is not often seen. The prolonged and ponderous approvals process discourages such an approach. And since departmental EDP management does not usually have discretionary funds to underwrite a substantial design study, management must make its decision on a sketchy, preliminary design – and correspondingly "soft" cost estimates. When approval based on those estimates is forthcoming, a full design often later shows that the system will cost far more than the sum originally estimated. Several such instances occurred among the projects we examined. At this point, too much money had been spent to

allow the project to be cancelled. Typically, it is broken up into modules and stretched out in time indefinitely. It is encouraging to notice that a recent Treasury Board circular (June 1983) requires that this two-stage approval process will now apply to EDP projects involving more than \$1 million. This directive would appear to meet some of the problems we have described here.

4.37 If managers can somehow overcome their problems in establishing plans and budgets, they must then find a way to monitor progress and actual cost. Here, the present state of project accounting in the government does little to help. A framework for project management is to be found in the Treasury Board's Administrative Policy Manual, and the Office of the Comptroller General has published guidelines for project monitoring and reporting; but, in the EDP projects we examined, we found few project cost accounting and monitoring systems that approached those described in the guidelines.

4.38 However much doubt there may be about the project's consumption of "internal" resources (staff hours, in-house computer time, etc.), the departments usually do keep careful track of expenditure on external contracts. Their doing so argues in favour of contracting system development out; this argument is not, however, conclusive. Generally, departmental EDP managers prefer to retain control over their computer system development projects through a project manager from their own staff. Contracting the project out to a commercial software house is thought by many managers to be unwise, because, when the system is delivered, they see no assurance of ongoing support for it, and they have no one on staff who has the builder's intimate knowledge of the system.

4.39 If the development is to be carried out in-house, therefore, EDP project managers lack a fundamental tool of management. They cannot tell how much their projects have cost to date, except by an approximate calculation based on the number of staff employed and how long they have been working.

Problem 4: How can the project manager deliver the system on time and on "spec"?

4.40 We encountered many systems delivered late and projects where the work now in progress was running much behind schedule. Delays of a few months were frequent, but sometimes the lateness ran to years. When on-time delivery was critical, however – as it often is when, for example, legislation changes – departments rarely missed a deadline: resources were then somehow found, even if doing so disrupted other projects. When delivery is late, the department can usually make a case that on-time delivery was not essential, and that little damage was done (or, indeed, that the delay permitted a better system to be built). In any event, we were often told, user pressure had so much altered the original design that the initial timetable for delivery had become meaningless. For the period of delay, of course, the savings that the system was designed to yield are lost. But if these savings were always pretty nebulous, and if no one seemed to be keeping track of them, the delay might appear unimportant.

4.41 Nearly all the methodologies urge a "post-implementation" review of the project, with participation of all those involved, to decide whether the system does what is required of it, and to capture and profit by the experience all have gained in its development. The departments we visited acknowledged the potential value of such reviews, but cases in which they have been performed are rare indeed.

4.42 Since there is no government-wide standard for maintaining project logs recording what was done, when, and why, we had great difficulty in piecing together narrative histories of the projects we examined. With that said, however, we believe the following broad statements to be true:

- an incremental improvement to a large existing system, carried out by the EDP professional staff of one of the departments long established in the EDP field, is likely to be on "spec", on budget, and on time – within some reasonable tolerance; and
- in other circumstances, departments' practices in managing systems development tend to fall well below the standards they themselves have adopted – standards which we believe to be attainable and representative of good private-sector practice.

4.43 **Do the resources now available to develop systems appear adequate to permit selective and controlled absorption of the new technology?** Our interviews disclosed a composite picture of system development activity that was by no means wholly dark: major systems were, and are, being developed successfully, though both control of costs and scheduling require more attention. The 1981-82 Treasury Board Summary of the EDP Reports and Plans of the departments indicates that, in September 1982, \$183.6 million in major system development projects were under way, approved or planned. Technically, these systems are usually of somewhat conservative design, but we did not find any widespread tendency to use obsolete technology.

4.44 The ability of the federal government to absorb the rapid technological advances of the 1980s should be, however, the object of very real concern. Most of the departments with long established EDP organizations now report that they are using 60 to 70 per cent of their professional staff simply to maintain and enhance existing systems. EDP managers pointed out to us that this proportion has grown steadily in recent years, as new systems went into service and then required maintenance and modification. Experience in private-sector development shops is comparable. In the government, however, since the overall person-year allocations of these organizations tend to be frozen, their capacity to develop new systems diminishes with every new computer application they put into service. If no relief comes, the moment cannot be far away that systems development must almost cease. In many departments, we also found that three, four, or even more years of work for the existing staff has been identified, approved, and is in the waiting queue. Beyond that seems to lie a user "wish list" of indefinite extent.

4.45 With so much of its resources needed simply to maintain and extend systems representing conventional technology, the average systems development shop is hard pressed to make technical people available to learn about, and experiment with, the newer technological developments. A widening of the disparity in levels of technological development inside and outside government must, therefore, be anticipated. Various expedients to relieve this situation are available and may be effective, at least in some measure. New "user-friendly" computer languages, simplified programming systems which permit users to do their own programming, personal micro-computers – all these may be of help. But fundamental redeployment of person-years and money, within systems development shops and to them from elsewhere in the department, cannot be indefinitely deferred, if advantage is to be taken of the technology now becoming available.

4.46 **What should be done?** If senior departmental management could see through the fog which now hides the systems development process (sometimes even from the eyes of project managers themselves), we believe the quality of project management would improve dramatically. To bring about that visibility, we see the minimal requirements we describe immediately below as essential.

4.47 The overall project and its phases should be defined; that is, it should always be possible to ascertain exactly what is to be delivered, when, and at what cost. This definition is the equivalent of the contract which, if properly drawn and kept up to date, defines the intentions, rights and obligations of the private-sector systems developer and those of the developer's client, the future system user. Deliveries against this "contract" should be verified by a procedure which establishes that the user has received what was bargained for, and which also discharges the developer from further responsibility for the delivery. Included here is the post-implementation review on which the methodologies insist.

4.48 All costs of the project should be identified as such and accumulated in accounts designed to alert management, at every level, to cost overruns and missed deadlines. These accounts would comprise not only financial data but also "logs" recording the nature and estimated cost of changes in design, and a general record of who decided to do what, when and why.

4.49 To be effective and objective, the documents and accounts required by these recommendations must be matters of official record in the department, and be subject to both internal and external audit. It is not enough that they exist only as working papers in the system development shop.

4.50 To ensure the completeness and integrity of the project accounting system, and to make certain that all funds spent on developing a system are charged to it, we believe it is important that the project accounting system be fully reconciled with the department's regular accounts. Otherwise, there will be a tendency to "bury" expenses incurred in connection with the project by charging them to accounts where they will have to bear less scrutiny. For the same reason, the project accounting system should, in its financial aspects,

be administered, not by the EDP organization, but by the department's financial officers, and should be based on and reconciled to the department's regular system of accounts.

4.51 We do not believe we are suggesting anything not already a feature of most of the "methodologies." The project accounting system we have in mind in no way departs from the Project Monitoring and Reporting guideline published by the Office of the Comptroller General. We should stress, too, that we do not believe project managers feel they have things they wish to hide. On the contrary, the absence of a proper project monitoring system deprives them of an essential management tool.

4.52 In summary, we recommend that departments should:

- formally define, in the early stages of a systems development project, what is to be delivered, when, and at what cost;
- control and record changes to, and elaborations of, this project definition, in such a way that changes are properly authorized, and their cost and timetable impact fully assessed;
- verify that the deliveries called for do in fact take place; and
- establish project monitoring systems based on auditable financial and other records sufficient to alert management to potential cost overruns and missed deadlines.

Acquiring EDP Facilities

4.53 A government department acquiring major computer facilities must do so in accordance with the Government Contracting Regulations and Chapter 440 of the Treasury Board's Administrative Policy Manual. Although these provide for many exceptional conditions and special situations, they clearly contemplate a normal sequence of steps that should be followed:

- determining EDP needs of departmental programs and establishing the order of priority for meeting them;
- make/buy analysis;
- obtaining Treasury Board approval in principle; and
- open tendering, through the Department of Supply and Services, with DSS returning to Treasury Board for final approval in the case of very large contracts, before letting the contract to the successful bidder.

4.54 In the departments and agencies we visited, we tried to find out what problems were being encountered at each of these stages of the acquisition process.

4.55 Determining needs and setting priorities. We found little disagreement on the broad principles to be applied in determining computer needs; they can be summarized as they were in paragraph 2.61 of our 1980 annual Report:

- The need for service should be defined and related to approved program objectives.
- There should be an adequate and up-to-date statement of the type and level of service required.
- All reasonable ways of providing the service should be evaluated as objectively as possible.
- The need for the service should be regularly reviewed.

4.56 The problems lie in putting these principles into practice, and they are severe. Indeed, if objective and quantifiable measures of need for computer services were available, many of the controls on acquisition could be eased. The principal problems are of three kinds: first, those arising from institutional hindrances to objective analysis of EDP needs; second, technical difficulties in needs determination; and, finally, priority setting problems.

4.57 At the heart of the institutional problem is the fact that program managers, who are the ultimate users of EDP services, neither are nor can be entrepreneurs. They must deliver certain program services to the public, with due regard for economy and efficiency. But they do not usually have to worry about the effect that acquiring a new computer will have on a profit-and-loss statement. They do, however, compete for computer service with the managers of other programs. This competition for resources is not like the competition of the marketplace; rather, it is a bidding process in which all players are tempted to exaggerate their needs to protect their positions in the final allocation of the available resources.

4.58 Even without this bias toward overstatement, the problem of needs determination would still be very difficult. The simplest case arises where a single computer, or computer complex, is to serve a single program. At least in that case, it should be possible to show that more money spent on the computer will improve the delivery of the program. The large departmental computer centres are, however, usually internal service bureaux, serving the needs of many programs and a multitude of "customers". Ongoing analysis of the needs of all these customers is something the managers of the internal service bureaux lack both the authority and the resources to do. In practice, therefore, the internal service bureau tends to base its case for additional equipment on projections of future workload based on present overall loadings and rates of growth.

4.59 This sort of justification is unsatisfactory, because it does not show how the computer services are being apportioned among the department's programs. To meet this objection, some departments use an "accounting routine" in the computer's operating system to keep moment-by-moment track of the computer resources being used by each task active

in the machine. In this way, users of the machine can be "billed" for the use they make of it. This permits the internal service bureau to show how its computer supports the department's programs. Whether that use is being made with due regard for economy and efficiency is, however, a question that the bureau manager must refer to the user. Since the users are many, and the uses complex, we found few internal service bureaux prepared to carry their needs determination to the user level.

4.60 Perhaps the most difficult needs-determination problem arises in those departments where EDP activity is geographically dispersed and organizationally decentralized. Such situations are common in those departments carrying out large programs of scientific research. Getting a clear, current and reliable picture of the complex needs of all the many users is a most challenging task for the EDP co-ordinator in such organizations.

4.61 With due allowance made for these institutional constraints, however, we still found that the quality of needs analysis studies was deficient in its purely technical aspect. Here again, there is no denying that the problems are difficult. For example:

- the program's EDP needs must be forecast for the probable technological life of the equipment, a period which could be anywhere between 3 and 10 years long;
- in some cases, determining the transaction-processing capacity of an unbuilt computer system is technically difficult; and
- the trade-offs between level of service (system response time, transaction turnaround time, etc.) and cost are usually, at this stage, ill-defined.

4.62 It is, therefore, not surprising that we found a disappointing technical quality of needs determination in many of the departments we visited. We believe that its quality could be substantially improved, but only if the resources devoted to it were considerably increased, and if the needs analysis were carried on continuously – not just by ad hoc studies done when an equipment acquisition is in prospect.

4.63 The cycle of technical studies must be performed several times, with increasing levels of detail and technical complexity, before a worthwhile proposal can emerge. This is demanding work, requiring a high degree of professional expertise and sustained effort. At present, few standards exist for its performance in government, and there is no recognized professional specialization for those who carry it out. This is most unfortunate, because senior management cannot be expected to review technical studies of this kind; yet it must, in making the priority decisions discussed below, be able to place full reliance on their accuracy and completeness. We are convinced that there are professional people, in both the public service and the private sector, who have the technical knowledge to do this work. What is required is standards or prototypes that define the content of the technical studies and the general way in which they are to be presented.

4.64 Treasury Board and the departments should take steps to give senior management assurance of the quality of technical staff work supporting EDP acquisition proposals; in particular, Treasury Board should commission the preparation of prototypes of the studies that should support acquisition proposals at each stage of the decision process and, if required, should publish a guide for preparing each type of study.

4.65 Establishing the EDP needs of a program and translating those needs into requirements for systems and facilities are no more than half the problem. The resources available are never sufficient to provide all the EDP support that the programs could profitably use. Somehow, an order of priority must be established for meeting EDP needs. To avoid having the department's EDP management arbitrate among its customers, many of the departments in our sample have established EDP steering committees, representative of all major users, to settle these priorities. This they can do only if the committee's members are senior enough to speak with full authority for the user organizations they represent. With this proviso, we commend the steering committee concept to departments that do not have such committees. Increasingly, priorities decisions will probably have to be made within the department, since everyone seems to agree that "new money" will be harder and harder to obtain. The decisions will be difficult, because they will often require robbing Peter to pay Paul. To meet this situation:

4.66 Where they have not already done so, departments with many EDP user organizations should establish EDP steering committees, representative of all major users. The rank of the members should be senior enough to ensure that the committee's view of the relative priority of the department's programs accurately reflects that of senior management.

4.67 To make decisions in EDP matters, senior departmental management will need an interest in EDP and an understanding of it that it does not seem to possess today. Here, what is needed is not technical understanding but rather an ability to spot proposals which, though technically sound, are of high risk, or those which have a broader scope and impact on the department's operations than can be tolerated. The Office of the Comptroller General has already taken some steps toward defining guidelines to meet this need.

4.68 Treasury Board should prepare a guideline for the use of senior managers, when they are asked to approve EDP proposals, to assist them to identify proposals of high risk, those where appropriate steps have not been taken to ensure technical soundness, and those where the assessment of impact on the department's operations has not been properly carried out.

4.69 **Make/buy analysis.** Only the departments with a limited amount of EDP activity now remain dependent on private-sector service bureaux, although most departments supplement their in-house capability by occasional use of private-sector facilities. The preference for in-house equipment seems strong and is confirmed by the data given in the Annual EDP Review published by Treasury Board: the average percentage of total

computer services costs expended annually on private-sector machine-based computer services was 14.1 per cent in a four-year period ending in 1978, and 14.8 per cent in a similar period ending in 1981; it has remained essentially constant in the interval.

4.70 Treasury Board approval. We usually found it almost impossible to locate documentary evidence of just what considerations had been laid before senior management when a major acquisition decision was being made. The documents most readily available were Treasury Board submissions. They and the other supporting documents were, commonly, advocacy pleadings in which the solution favoured by EDP management was buttressed by every available argument, and in which alternatives, if mentioned at all, were identified only to be dismissed. Clearly, the EDP people were not asking that senior management choose from a costed list – a "menu" – of options to satisfy an EDP need; rather, they sought ratification of a decision they had already made.

4.71 It was evident that the Treasury Board Secretariat is not staffed to give acquisition proposals serious technical review. The Information Management Group in the Secretariat is responsible for policy implementation in such areas as EDP and telecommunications, and this responsibility extends to reviewing all the annual plans and special submissions relating to these areas. The mere fact that there are only five officers in the group leaves no doubt that it can catch only the extreme cases where the department has produced a wholly indefensible proposal.

4.72 An important, and fairly recent, development marks an evolution in the Treasury Board's role in the acquisition process. In at least two cases, the Board has found it possible to approve the adoption by a department of a "common technology." This means, in effect, that, from now on, the department's central computers will be of the technology manufactured by IBM or by one of the companies whose computer "architecture" is compatible to that of IBM. Other suppliers, if they wish to bid equipment (tape drives, magnetic disks, telecommunications, for example), must make it compatible with an IBM-technology mainframe.

4.73 The "common technology" policy is not an easy one for a government to announce, because it tends to exclude some major mainframe suppliers from bidding, though they could bid on a requirement for an IBM-compatible satellite computer, if they wished. Once adopted, however, the "common technology" policy does open the tendering process to quite a wide range of companies now making IBM-compatible gear. The policy does not necessarily confer an advantage on IBM, since that firm has as much or more competition within the market covered by the "common technology" as it has outside it – even in mainframes.

4.74 Tender. Open tender is not absolutely mandatory, but it is clearly intended to be the norm in major acquisitions. In practice, the open tender requirement conflicts with the fact that most of the large EDP establishments are firmly locked in to a single mainframe supplier. This situation has arisen neither through the inertia of the departments nor through the machinations of the suppliers. Its cause is the enormous and

ever-growing investment in application software that departments have developed to run on their supplier's hardware. Switching to the hardware of another supplier entails converting the application software to run on the new system. The coming of on-line databases and telecommunications-based systems has tended to tighten the link between application software and the hardware it was developed to run on. Today, therefore, a wide open tender to replace an existing mainframe is pretty rare: we encountered only one in our examination of the recent acquisitions of six departments and, in that single instance, the circumstances were very exceptional.

4.75 In general, therefore, open tendering is restricted to cases where an entirely new application is to run on hardware independent of existing systems, or where the tender is for equipment peripheral to the central computer mainframe(s).

4.76 It is in this context that the decision by some departments to adopt a "common technology" appears in its full significance. By making such a decision, a department that now operates on mainframes of, say, three suppliers must still convert the software now running on the mainframes of the two suppliers to be dropped. Doing so is expensive and might take as long as five years. But, within the common technology, effective open tendering can take place for equipment of all types, presumably with advantage to the taxpayer.

4.77 The other side of the coin is that the "common-technology" policy accords de facto recognition to IBM technology as the industry standard; and, in practice if not in principle, it excludes some major mainframe suppliers from the bidding. It will be of great interest to see whether other departments, whose main technology today is not IBM, see enough advantages in the "common technology" strategy to make the switch.

EDP Security: Disaster Preparedness

4.78 As an organization becomes more dependent on the computer, it becomes more vulnerable to a disaster that knocks the computer out of service. The most recent EDP technology offers some hope that this trend toward highly centralized and vulnerable systems can be reversed. For the next decade or so, however, dependence on central databases (large collections of computer-readable data) will probably grow. The increasing vulnerability that accompanies this growth will be to disasters that knock out a critical computer and halt a service to the public that can no longer be provided manually. The present state of preparedness for such disasters offers no ground for complacency. Little beyond off-site storage of backup copies of data is now being done to ensure post-disaster continuity of service.

4.79 Why? The answer is lack of funds. Providing "credible" disaster preparations is very expensive. The departments have found that Treasury Board will not give them extra funds for this purpose, and they are unwilling to absorb the large costs in their regular budgets. A spectacular disaster would, if it occurred, make it easier for EDP managers to get departmental funds for disaster preparedness. In Canada, however, no such disaster has

captured popular attention since the Sir George Williams affair in 1969. The odds against such an occurrence seem long, and departmental management has usually accepted the risk of leaving the situation the way it is.

4.80 Only one of the eight departments we interviewed in this context had believable plans, thought out in detail, for moving to an alternative site, should the facilities at a central site be knocked out for a long period. This department has several computers of the same kind, regionally dispersed. In these circumstances, a disaster plan based on moving work to another of the regional sites is believable. Such a procedure must, however, be practised every few months, because computer programs and the hardware they run on change rapidly. We know of only one department that is carrying out a sustained program of such "drills", which are expensive and disrupt ordinary operations.

4.81 We found that EDP managers were acting conscientiously in those physical security matters where no major outlay of funds is required. For example, the recommendations of the RCMP's Security Evaluation Inspection Team (SEIT) were generally acted upon, where action could be undertaken and resourced by local management. (SEIT is a central service available to a department to review its EDP security situation.) Similarly, we found that nearly all the departments we spoke to maintained back-up copies of their critical data and programs at locations away from their computer sites.

4.82 The major problem is the cost of partially duplicating facilities to provide enough surplus capacity to handle critically important workload after a disaster. How much extra capacity is required, and how long after the disaster it is needed, both depend on how vital it is to maintain continuity of service to the public. Only one of the eight departments we examined had conducted a formal review to determine its maximum tolerable period of computer outage.

4.83 Often, it was clear that management was having a problem assessing the importance of the computer to the department's operations. If the transfer payment programs were looked after, and the military and civilian payrolls met, many departments seemed to feel they could get by for a long time without the computer. From that viewpoint, spending a lot of scarce money on a back-up computer site did not seem to carry very high priority.

4.84 To see whether a similar opinion prevailed outside government, we made some enquiries in a small sample of private sector firms. And, indeed, the picture there is not very different. Most of the firms had made no believable disaster recovery preparations. There were exceptions, of course: one or two major institutions, recognizing their total dependence on centralized databases, had built ultra-secure fortresses to protect them. Others had sought to reduce the expense of a back-up site by joining forces to build a site with all the basic environment for the computer (airconditioning, raised flooring, etc.) but no equipment (since the members of the "club" operated equipment of different types). The concept would

work only if a member firm's computer hardware could be replaced within a tolerable interval after the disaster.

4.85 The disaster recovery issue seems to be unresolved. Three departmental proposals for back-up facilities have recently been rejected by Treasury Board, though in each of these cases the Board left the door open for the department to make further, more fully elaborated proposals. The departments might grapple with the back-up problem more effectively in concert, rather than as individual entities, especially if a common back-up site seemed attractive. But, as far as we are aware, no formal joint initiative is under way.

4.86 Although the decision to accept the risk of going without back-up may be defensible in some cases, we believe it ought not to be made by default. We therefore recommend the following:

4.87 Departments should formally assess the length of time their programs could tolerate an interruption of computer service, and the computer capacity which they would need thereafter to provide emergency service until a site made inoperable by disaster came back into service.

4.88 In consultation with the Treasury Board Secretariat, departments should explore whether there is some joint undertaking which would provide an economical solution to the disaster-preparedness problem.

4.89 Whatever solutions departmental senior management finally adopts should be formally recorded, and the record should state what risks are to be provided for, and which are to be accepted.

Managing EDP Personnel

4.90 The period 1978-82 was one of extremely strong demand for computer personnel such as programmers, systems analysts, project leaders, and software specialists. The growth in demand is reflected in the quarterly counts of Canadian vacancies, maintained by the Technical Service Council (TSC). These counts more than doubled during 1978; by early 1982, the level was about five times the 1977 base year. During this period, employers responding to the Council's surveys reported 20 to 40 per cent annual turnover in such jobs. The 1982 economic downturn quickly reduced this high demand and turnover. By the end of 1982, employers were reporting turnover rates of four or five per cent annually.

4.91 These sharp fluctuations in demand for EDP personnel were also felt within the federal government service. The departments' Annual EDP Reports to Treasury Board – especially those of 1981 – contain many complaints about problems in obtaining and retaining qualified computer systems (CS) staff. The Advisory Committee on Information Systems (ACIS), a high-level interdepartmental committee which advises Treasury Board

on EDP matters, noted in 1981 that the "shortage of CS personnel was an extremely serious management problem." By the end of 1982, on the other hand, departments were reporting an ample supply of good applicants for these jobs, at least in the junior levels. It was still said to be difficult to get experienced systems software people and project managers. When we visited departments early in 1983, however, improving economic conditions were having an effect; the Technical Service Council was reporting the first upturn in vacancies for computer professionals in 21 months; and some managers to whom we spoke anticipated a return of the shortage conditions, perhaps intensified.

4.92 Given its dependence on EDP to support its programs, the federal government needs the ability to obtain, train, and retain the CS personnel required for that purpose. We therefore decided to look more closely at the CS group to define the extent of the 1978-82 shortage, determine its effect on a sample of departments and see how they reacted to it. We tried to identify the major constraints in recruiting and retaining good CS personnel and to develop recommendations looking to future periods of intense demand.

4.93 **Extent of the shortage.** The federal government CS population grew by approximately 11 per cent from January 1978 to December 1981, at which time there were 2,460 CS employed. This growth was not easy to achieve. In 1976, losses of CS staff from the government were approximately 6.9 per cent of the total CS population. By 1981, this annual loss rate had grown to almost 13 per cent. In the 1981 environment of increasing turnover and scarcity of knowledgeable EDP staff, recruitment of new personnel into the CS group from other occupational groups and from sources outside the federal government increased by 84 per cent over 1977 levels.

4.94 The losses of CS staff from the government do not seem extreme when compared to those of the private sector, where annual turnover rates of 20 to 40 per cent were common in this period. Losses experienced by the total computer systems community in the federal government do not tell the whole story, however. Individual EDP managers had also to cope with losses of CS to other departments and to other units within their own departments. Public Service Commission data on individual departments, reflecting interdepartmental transfers and promotions, confirm losses of 10 to 36 per cent annually. From the manager's point of view, therefore, the effect of the shortage and the staffing turbulence it engendered did not seem greatly different from that experienced by private-sector managers.

4.95 These sharp losses do not appear to have caused a long-term decrease in the number of persons in the CS occupational group; the losses were indeed replaced, but the newcomers to the organization were much less knowledgeable and experienced than their predecessors.

4.96 **Its effect on EDP in the departments.** In our sample, only Statistics Canada and Supply and Services Canada – departments with populations of CS personnel in excess of 200 – were able with any consistency to avoid wide fluctuations in the turnover of CS staff from year to year. The departments with small CS populations seemed to be those hardest

hit. Statistics Canada had annual losses under 20 per cent in all of the shortage years except 1981; the Departments of Communications and Labour, however, both suffered losses in excess of 20 per cent for all but one year in the years 1977 through 1981.

4.97 Managers in departments with less than 100 CS staff indicated that they felt particularly vulnerable during the shortage. They believed that, because of the small size of their organizations, their personnel gained a broader variety of experience and were therefore in greater demand. These managers believed that the loss of 2 or 3 people in a small team of, say, 10 was a much heavier blow than it would be to a larger organization.

4.98 The managers we interviewed had no doubts about the damage the turnover was inflicting on their organizations. They found themselves having to spend a much larger proportion of their time on the staffing process, just when a staff shortage and the many new staff coming on strength made maximum demands on them to lead their teams. The staff they lost were their experienced people; those who came in were usually fresh from the community colleges and the universities. (This is confirmed by the Public Service Commission, which reports that government-wide losses of CS2s exceeded intake at that level, from outside the government, in each of the years 1977 through 1980. The situation at the CS3 level was even worse.) In short, the managers believed that the high turnover stripped their organizations of many of their best personnel – the fast learners, the brightest, and the most highly motivated.

4.99 **Efforts made by departments to relieve the effects of the shortage.** Given the rather dark picture of the turnover effects painted for us by the managers we interviewed, we were surprised to find how little the traditional methods of recruitment and training were modified by departments to meet the emergency. Commonly, within the departments, EDP staffing is done piecemeal, vacancy by vacancy, and there seldom seems to be sufficient co-ordination to produce an integrated program for staffing, training, career planning, and so on for the whole EDP organization.

4.100 There was little evidence of functioning plans to cycle personnel through a variety of projects to develop their skills. Similarly, although training was generally available, particularly in the departments with the large CS populations, financial constraints and operational pressures often required that it be oriented to meeting immediate operational needs rather than to developing a body of computer expertise required in the long term. Few of the departments we visited were doing human resource planning to identify their future requirements for CS staff in terms of numbers, levels and skills. Also, there was little evidence that career paths were being identified for personnel currently on strength, or that succession planning was being done for critical jobs.

4.101 In fairness to the managers, we should recognize, however, that they felt that succession planning is not easily reconcilable with the merit principle and the system of appointment to position that prevails in the public service; grooming Mr. A to fill position X can be seen, they believe, as an attempt to "rig" the eventual competition for that position.

Nevertheless, it is our view that it is usually possible for managers to outline, for their staff, avenues of personal development from among which they may choose.

4.102 The increasing demand for computer systems personnel that began to be felt in 1978 was not recognized by the Public Service Commission or by the Personnel Policy Branch of the Treasury Board Secretariat until well into 1981. For reasons that are unclear to us, the pressure on the staffing processes in the departments to get CS staff did not communicate itself through to the Commission until then. Finally, a working committee of the Advisory Committee on Information Systems demonstrated to the responsible officials of the Commission that their perception of the turnover of CS staff needed revision. It was, therefore, only in late 1981 that the Commission began to react to the shortage.

4.103 To its credit, when the Commission recognized the problems identified by ACIS, it moved to react more promptly to individual staffing requests, and it initiated Job Fairs at computer conferences to allow departments to locate and recruit competent staff with a minimum of delay. Unfortunately, for many departments the shortage had already gravely depleted experienced staffs, and the damage was already done. By that time too, the economic recession had begun, and the shortage was abating.

4.104 The Treasury Board Secretariat has the primary responsibility for conducting government-wide human resource planning for critical occupational groups. The Secretariat's Human Resources Group did not initially believe the CS shortage to be critical and took no action to deal with the departments' concerns. This absence of response appears to confirm the observation made in paragraph 3.35 of our 1981 annual Report that the Secretariat "has not met its overall responsibilities for government-wide human resource planning". Noting that the Secretariat has responded to occupational group problems when they became urgent rather than by anticipating shortages and developing appropriate plans, the 1981 Report, paragraph 3.37, recommended that the "Secretariat should regularly assess human resource requirements in the public service, identify critical occupational groups for which human resource planning should be carried out by the central agencies and ensure that the appropriate action is taken." Unfortunately, these mechanisms were not in place at the time of the CS shortage.

4.105 **Constraints on the EDP manager in personnel matters.** Since this study is of the management of EDP, it does not attempt any general examination of the classification and staffing processes in the public service, or give consideration to collective bargaining matters. In the view of the managers we interviewed, however, these are of central significance in any explanation of the constraints which limited their ability to respond to the CS shortage. We believe that we ought to report these views without, however, asserting that the picture they present is complete or balanced.

4.106 As the managers saw it, then, the recruitment and staffing process was itself one of the prime constraints. Managers stressed that it was frequently necessary to react quickly to the availability of a qualified person before that person was lost to another job. The managers felt particularly vulnerable when they were in competition with private-

sector employers. They cited the excessive number of steps, the paperwork and the bureaucracy surrounding the staffing process as causes of delays which they said averaged four to six months to fill available positions, even when up-to-date position descriptions and classifications were available.

4.107 An evaluation of the staffing actions undertaken by several of the departments included in our study confirmed that the managers' opinions were not always exaggerated. For example, data prepared by the personnel administration branch of one of the departments in our sample show the average overall elapsed time required in 1980-81 to fill vacant CS positions (at other than the entry level) by open competition was 146 calendar days. If there was a closed interdepartmental competition, 193 days were needed; or if there was a closed competition within the department, 245 days. (Officials of the Public Service Commission have pointed out to us that the staffing interval can be made much shorter if the department has forecast its needs to the Commission in time for an inventory of candidates to be developed.)

4.108 Moreover, the Public Service Commission noted in its *Dialogue* magazine in February 1981 that the basic process required an average of 50 working days for a "closed" (internal to the public service) competition using poster advertisements. This average was taken over job competitions for all occupational groups, not just those for CS. An additional 21 working days were required to deal with such complexities as language testing and checking for suitable candidates in the priority lists (for example, those identifying persons surplus to requirements or laid off). Later articles in the same magazine noted that three large Canadian corporations with national and multi-national operations were able to complete a similar type of competition in an average of 17 working days. *Dialogue* pointed out that federal government departments are bound by the Public Service Employment Act to specific procedures that account for much of the time taken to complete a staffing action.

4.109 Finally, individual EDP managers stressed their concern with the inadequacy of the training they could afford to give their computer staff. Restrictions on the proportion of departmental funds available for training forced managers – or so they said – to concentrate on courses oriented to specific hardware or software which the individual was required to use on particular jobs.

4.110 Tight person-year controls, scarcity of supply in the market for computer systems personnel and the difficulty in staffing permanent CS positions are clearly reflected in the growth of demand for contract personnel. The Department of Supply and Services maintains Regional Master Standing Offers (RMSO) covering such services; it comprises a series of contracts between DSS and participating EDP contractors that provides for the supply of suitably qualified personnel on an as required basis, at previously agreed daily rates. Departments wishing to acquire services under the RMSO agreements simply issue a requisition to a supplier specifying the requirement. In total, the actual value of contracts for the 12-month period commencing October 1981 under RMSO agreements was about \$19.5 million.

4.111 In 1981, the average daily rate paid to contractors we estimate to have been \$300-\$320; and we have calculated they worked some 62,000 person-days, or around 275 person-years. Since, at that point, there were some 2,460 persons in the CS category, the RMSO contractors were equivalent to 11 or 12 per cent added to the numbers of the available internal CS staff.

4.112 These figures strongly suggest that some EDP managers have found a measure of relief from their computer systems staff problems by resorting to contract personnel. Indeed, some of the departments we visited are obviously dependent on these services.

4.113 **Conclusions respecting management of EDP personnel.** There is evidence that the economy of the country is now coming out of recession. As noted earlier, this recovery is being accompanied by increasing demands for specialist computer systems personnel. Recent projections of the demand for such personnel for the years 1983 and 1984 vary from predictions of slow and cautious growth to a return to the acute shortage of the early 1980s. At present, the departments and agencies in our sample appear as poorly prepared for a shortage as they were in 1978.

4.114 We have been told by officials of the Public Service Commission and of the Treasury Board Secretariat that a proposal for a Human Resources Management System has been scheduled (subject to ministerial approval) for implementation in 1985, and that this system might meet many of the concerns we have expressed. At present, however, the central agency machinery to deal with a shortage situation does not seem to be much better developed than it was in 1978. Nor does any department in our sample appear to have used the experience gained between 1978 and 1981 to develop a strategy for retaining existing CS staff. The ability of departments to recruit, train and develop computer systems specialists in a planned and co-ordinated way does not seem to have improved. Continuing difficulties in retaining skilled and experienced staff must, therefore, be anticipated.

4.115 In summary, we found that the EDP managers in the public service were faced in 1977-81 with a variety of extremely difficult problems caused by a very buoyant market for computer systems personnel. The scarcity conditions in this employment market created high turnover in CS positions and led to a serious loss of experienced EDP systems specialists. The losses in numbers were eventually made up, but the levels of expertise – at least in some organizations – were more permanently affected.

4.116 The private sector was also affected by the scarcity market, but its effects on the government EDP community were aggravated, at least in the view of the managers concerned, by institutional constraints which hindered them from taking appropriate, timely and vigorous steps to counter the worst effects of the losses of experienced staff they suffered.

4.117 The managers' statements on these issues should not be accepted uncritically. We believe, however, the opinions they have expressed to us are so widely held that the whole area deserves closer examination. The dependence of the government on EDP is great

and increasing, as we have noted; in the last analysis, that dependence is largely on the expertise of the CS community. We believe it is reasonable to foresee a return of the scarcity employment market for CS above the entry level, and that it should be possible to find ways to enhance the government's ability to recruit and retain these people, even in such a market.

4.118 The Treasury Board Secretariat and the Public Service Commission, in conjunction with departments, should:

- review the problems identified in this study and the recent experience of departments and central agencies in the recruitment, training and development of CS staff;
- determine which of the problem areas lie within the purview of departments, and which must be addressed by central agencies; and
- develop and implement measures to meet the problems identified and monitor their results.

Strategic Planning for EDP

4.119 Our earlier experience in comprehensive audits suggested that few departments were complying with the Treasury Board directive that each department shall manage its EDP activities in accordance with formal, approved plans. These plans, the Board suggests, should be of two types: the first, long-range and strategic; the second, short-range and operational. In practice, we rarely found anything approaching a long-range, strategic plan; often there was only the Annual EDP Report and Plan (now called the Information Technology and Systems Plan) which the Board requires from each department.

4.120 The absence of these plans puzzled us, because we could not imagine how a modern EDP establishment could be managed successfully without them. The lead times to acquire computer hardware and to develop application software – and also to recruit and train technical staff – are now so long that a manager must work to a planning horizon three to six years away. Moreover, the long-range planning process provides a most useful opportunity to gain senior management's understanding of, and support for, the EDP function. If the benefits of long-range EDP planning were so obvious, why were the plans so few?

4.121 But, first, were the plans really as rare as our earlier experience indicated? In our sample of 10 departments, we found that formal plans and formal planning processes were few indeed, although there are now one or two cases where substantial planning work has been done. Most departments (7 out of 10) are now committed to producing a formal plan, but there is a wide variety of views on what such a plan should contain. We believe there is a need for Treasury Board to assist the departments here, by preparing one or more prototype plans to illustrate the sort of material they should contain.

4.122 Often, we did find informal plans and planning processes in existence that might meet much of the need. In many departments, the senior EDP managers seemed to have a pretty good idea of what they wanted to do over the next few years. Why, we asked, do we find this sort of informal planning in some departments and not in others? And, where it does exist, does such informal planning meet the need?

4.123 We found the best developed informal plans in departments where the EDP organization is large and tightly centralized. In these departments, there is usually a large, stable baseload of EDP work. This workload can be fairly reliably projected into the future, because it is unlikely to be changed suddenly by shifts in departmental direction and policy. It thus provides EDP management with a reasonably firm base for planning. Departments with small, recently formed EDP establishments usually lacked this baseload: they seem to find serious difficulty in long-range planning, even when EDP was under centralized management.

4.124 However, where the EDP function is scattered in small, geographically dispersed pockets, there is usually no single person with substantive department-wide authority over it, and the department's EDP co-ordinator is hard put to keep track of the department's EDP developments even after they happen.

4.125 The difficulty with informal planning processes is, of course, that the plans produced may not have the full approval and support of the most senior departmental managers, nor is there any assurance that all the officials who should participate in the planning do so. Many EDP managers are very conscious of this defect and can document a succession of attempts they have made to get formal approval. It usually proved impossible, however, to get agreement to more than bland generalities, especially in those departments that are really loosely-knit federations of semi-autonomous branches. The lack of formal planning processes carries with it the danger that the department's EDP plans may bear little relationship to its overall corporate plans.

4.126 The lack of a formal planning process carries with it the danger that rapid advances in technology will make EDP systems obsolete by the time they are placed in service. In an extreme case, development could begin with a concept based on the current technology and, years later, after spending millions, a system could emerge which was inefficient or inadequate in an EDP environment that had made radical advances in the interval. (No clear case of this surfaced in our sample, but we did encounter an instance in which a complex system was decided on that was based on a central database, centrally imposed procedures and the integration of a wide variety of functions, all features being characteristic of the technology prevailing in the early to mid-1970s when the decision was made. Development of the system continued for nearly 10 years on this basis and, although the organization later began to use new microprocessor and telecommunications-based technology in its work elsewhere, within the main EDP system the degree to which it could be applied was constrained by the original choice).

4.127 However difficult it may be to avoid, planning myopia can have serious consequences. One department in our sample found, in 1976, that its computer supplier was getting out of the business and passing its customers to another supplier who would, for a while, service the equipment and maintain the software. For that reason, and to meet an increasing workload, the EDP people in the department knew that they would soon have to change equipment. Yet, despite agreement in 1977 as to what should be done, little action resulted until 1980, when a review commissioned by the internal audit group reported that the equipment replacement project had fallen seriously behind schedule. At about the same time, the successor supplier gave notice of the impending withdrawal of maintenance service for the old machine. The withdrawal-of-service date was then so close that the department could not go to an open tender, because such a tender might select a supplier whose equipment would call for conversion of existing application software. A directed tender, therefore, had to go to the one supplier – the "successor supplier" mentioned above – whose hardware was compatible with the application software without a major conversion effort. Planning problems of this sort can be expected to intensify as departments attempt to put to use the new microelectronic technology of the 1980s.

4.128 It seems clear that, if departments are going to make selective and effective use of this new technology, long-range EDP planning will have to be done on a scale scarcely imagined today. The systems to be built will be central to the moment-to-moment, work-day life of nearly every public servant; they will also be "on-line" and accessible in real time throughout the day – and they will take years, and many millions of dollars, to implement.

4.129 **Departments should:**

- **establish clearly defined planning processes to produce the formal EDP plans required by Treasury Board policy;**
- **clearly assign responsibilities and resources for planning;**
- **ensure that the formal plans and processes are integrated directly with the department's overall corporate plans and planning processes and are sensitive to technological change; and**
- **use the plans and the planning process associated with them as the principal means of enabling their senior management to make informed decisions on EDP issues (especially those concerning adoption of new technology) and to monitor the carrying out of those decisions.**

4.130 To provide guidance to departments on the nature and content of the the EDP plan called for in its policies, Treasury Board should publish one or more prototype plans.

The Role of Treasury Board

4.131 In Chapter 440, the Administrative Policy Manual states that the Administrative Policy Branch (APB) of the Treasury Board Secretariat "is responsible for developing, revising and interpreting policies and guidelines for EDP planning, procurement, operations and evaluation, and for reviewing and recommending action on departmental plans and related submissions." The Secretariat's Program Branch is also concerned when EDP matters surface in the course of its review of departmental plans, programs and organizational proposals. The Personnel Policy Branch also enters the EDP picture because of its mandate to develop, implement and evaluate personnel management policies, programs, standards and systems. Taken all together, these add up to a very broad mandate. Its existence inclines anyone examining EDP in the federal government to turn to the Treasury Board for solutions to government-wide problems.

4.132 In practice, the Board makes rather sparing use of this mandate, and its willingness to broaden its intervention in EDP issues is uncertain. Moreover, the number of Secretariat officers concerned with EDP policy does not appear adequate to support a greatly increased scale of activity. It is appropriate, therefore, to examine the role actually played by the Treasury Board in EDP before making any suggestion as to how that role might be modified. We will concentrate on the EDP functions of the Secretariat's Administrative Policy Branch (APB). The Branch:

- develops the EDP policies now principally expressed in Chapter 440 of the Administrative Policy Manual;
- receives the Information Technology and Systems Plan (ITSP – formerly the Annual EDP Report and Plan) prepared by departments and agencies having EDP activities, and advises the Board whether (and under what conditions) each Plan should be approved;
- assists Program Branch to assess the EDP content of special submissions from the departments, once again advising the Board on approval; and
- publishes an annual *Review of EDP and Telecommunications in the Government of Canada*. Some of the data included in this periodical are of interest both to the government EDP community and to private-sector equipment vendors. The cost of producing the data is significant: some of the larger departments have one or more person-years tied up in co-ordinating the collection of the ITSP data which are rolled up into the tables in the Review. In our judgement, the types of data collected and the way they are tabulated require revision to reflect changes in EDP which have occurred since the Reviews started to appear in the early '70s.

4.133 **Policy formulation.** The APB has sometimes seemed reluctant to develop a global, integrated structure of EDP policies. Individual policies have been developed or modified as situations arose in particular areas requiring policy action. On the whole, however, we found that the existing EDP policies serve the purpose reasonably well, at least within the traditional boundaries of EDP. In the near future, however, as APB officials

appear to recognize, new policy will need to be developed to cover office automation, word processing, environmental health and safety in the office of the future, library services, and indeed the whole new area of management of information as a resource.

4.134 APB officials do not see their role as extending to monitoring departments' compliance to the policies which APB develops and promulgates in Treasury Board's name. Rather, they see compliance monitoring as being the province of the internal audit staff in departments. Our position remains that stated in paragraph 3.22 of our 1981 Report:

Policies and systems should be monitored to assess compliance and evaluated to assess their effectiveness.

- Systems should be in place to monitor the adherence of departments and agencies to policies and systems and to evaluate the degree to which they are achieving the desired result in a cost-effective manner.
- The results of monitoring and evaluation should be used in the revision and development of policies and systems.

4.135 The two positions are reconcilable if the departmental internal audit organizations can do effective compliance auditing in the EDP area, an issue which we will examine in future Reports.

4.136 In our interviews with officials of the Treasury Board Secretariat, we detected an understandable reluctance to have Treasury Board take a more prominent leadership role in introducing the new technology to the government. There is certainly wisdom in the view that the needs of the departments are too varied and the whole undertaking is too vast to warrant any attempt to manage the introduction of office automation "from the centre". Clearly, departments must do most of the planning and managing themselves. We are also aware, however, that, in the departments we visited, the activity directed toward office automation is fragmented, largely unco-ordinated, and very modestly resourced. It is hard to see how significant developments can soon take place without some leadership from the Treasury Board.

4.137 **Plan and submission review.** The APB officials seem to recognize the disparity between their present resources and the enormous task that any full review of EDP plans and submissions would represent. Of necessity they tend to concentrate attention on a few cases where unusual developments are taking place or are foreseen.

4.138 Here, we believe that our previous recommendations intended to increase the "visibility" of the system development process would, if put into effect, assist the APB in this part of its role. Although the current state of government EDP would scarcely justify dismantling the present Treasury Board machinery for its control, clearly some departments could earn a degree of autonomy by demonstrating competence to manage their own EDP affairs. But the "visibility" we have recommended would obviously be a pre-condition of that

autonomy. We are not suggesting that, for such departments, the basic submission and reporting requirements would be withdrawn; rather, we believe that implementation of these recommendations would allow the Board's officials to identify departments on whose EDP proposals they could place a high degree of reliance. APB would thus be able to give more time to the proposals of the departments that had not arrived at the same level of EDP maturity.

4.139 Future policy needs - an example. Although we share the view, expressed by the Secretariat officials we interviewed, that the Board should not attempt to manage EDP in detail and across the whole of the government, we believe that as departments begin to feel the effects of some of the current developments in technology, the Board will have to intervene at the policy level.

4.140 An example will illustrate this point. We have estimated that, in 1982, the government entered into about \$27.5 million of contracts for purchasing or renting the category of word-processing equipment administered by the Office Systems Group in DSS-Supply. This is by no means the whole intake of word processors, but only the part comprising stand-alone units not usually looked on as EDP equipment, though they incorporate a microprocessor. About 2,100 work stations of this type appear to have been acquired during 1982 (the precise figure is unknown, and the figure we give here is based on a sample of DSS records).

4.141 Until recently, acquisition of word processors of this type was handled at DSS by a unit separate from that responsible for acquiring electronic data processing equipment. In many of the departments we visited, these acquisitions were processed routinely by the administrative services of the department, in much the same manner as the purchase of a typewriter would be handled. The EDP organizations in some departments do have a sign-off control on these acquisitions, but most do not. The significance of these developments becomes clear when one notes that, already, about 26 per cent of these units incorporate hardware permitting them to be linked to some other computer by telecommunications. It is anticipated that this fraction will grow substantially in the next few years. But no industry-wide standard telecommunications interface between computers yet exists; therefore, an organization wishing to have its computers "talk" to each other must ensure telecommunications compatibility of the computers when they are acquired. At present, we know of only one department operating several equipment types that has an intercommunication standard.

4.142 The danger here is that a "Tower of Babel" will arise as soon as those who use the equipment discover its potential to communicate with other computers and access the big departmental databases. At present, the confusion is compounded by a very gradual, and not very orderly, approach in the EDP industry itself to a general intercommunication standard or standards.

4.143 Against this rather chaotic background, a significant debate is going on within the EDP community in the government. The managers of the large EDP organizations see

uncontrolled proliferation of incompatible equipment, and foresee pressures from self-taught personal-computer users to gain access to corporate databases, in ways the managers believe will endanger the integrity of those databases.

4.144 The EDP user community tends, on the other hand, to see the coming of the microprocessor as a way to escape from the frustrations of being a captive customer of the large departmental EDP centres. At last, users may be able to do their own system development in their own way, on their own schedule, without having to wait for years in the development backlog queue. Such users are inclined to see initiatives by EDP management to assert control over microprocessors as a form of imperialism. They discount the compatibility argument, saying that the equipment becomes obsolete so rapidly that present acquisitions will be due for replacement before the intercommunication problem arises.

4.145 Some departments are attempting to resolve this issue; others are not. It is hard to see how Treasury Board can long remain on the sidelines, because departmental senior management is not usually technically equipped to arbitrate between the EDP managers and the present and prospective microprocessor users. Sooner or later, government-wide policies and standards of some sort must be established.

4.146 The Treasury Board should review, clarify and, as necessary, strengthen its role in the management of information technology so that departments may know where they can expect the Board's direction and guidance and where they are to be left on their own.

4.147 In particular, the Treasury Board should revise its definition of EDP to encompass all those aspects of electronic information handling on which it wants special reporting or wishes to exert special control.

4.148 The Treasury Board should state how it intends to monitor departments' compliance with its policies; also, it should make clear how it proposes to get feedback from departments to evaluate the effectiveness of its policies.

4.149 If the Treasury Board intends to rely on departmental internal audit organizations to monitor compliance with its policies, it should take steps to ensure those organizations have the understanding of EDP that such a role requires.

4.150 If the Treasury Board is prepared to assume a leadership role in encouraging and facilitating the introduction of new information-handling technology, it should say so. It should then take the initiative by:

- developing a strategic plan to review, consolidate and bring existing EDP policies up to date;

incorporating in this plan provision for new policies to guide development in office automation, word processing, library services, and so on, to cover the new information technology areas;

- reviewing, clarifying and simplifying the reporting requirements for the Annual Information Technology and System Plan; and
- carefully considering departments' activities in developing office automation and related technologies, with a view to bringing about a balance under which major duplications of effort are avoided without stifling departmental initiative through over-rigid central control.

4.151 If, however, the Board does not wish to take a leading role, it should quickly make known to departments what areas are being left to their initiative and where, in the Board's view, departmental action is most urgently required.

* * * *

As this chapter was being prepared for publication, we were advised by Secretariat officials of that the Treasury Board had given a mandate, on 7 July 1983, to a Task Force on Informatics whose activities will extend over the next 12 to 18 months. The terms of reference of the Task Force appear to direct its attention to concerns similar to many we have expressed in this chapter, and to signify that the Treasury Board intends to take a leadership role in developing the whole information technology area within the federal government.

MANAGEMENT OF THE FORECASTING PROCESS
DEPARTMENT OF FINANCE

**MANAGEMENT OF THE FORECASTING PROCESS
DEPARTMENT OF FINANCE**

Table of Contents

	Paragraph	Page
SYNOPSIS	5.1	175
Background	5.8	177
Audit Scope	5.14	179
Observations and Recommendations		
The Forecasting Process	5.17	179
Evaluation of the Forecasts	5.21	182
Development and Maintenance	5.25	182
Documentation	5.32	184
Electronic Data Processing	5.35	184
Exhibits		
5.1 Organization of Major Current Forecasting Activities		178
5.2 The Forecasting Cycle		181

MANAGEMENT OF THE FORECASTING PROCESS DEPARTMENT OF FINANCE

SYNOPSIS

5.1 The Department of Finance prepares regular forecasts of Canadian economic activity. These forecasts are a basis for policy advice to ministers and are key inputs into federal budgets. In addition, the forecasts of gross national product and other key variables are used in calculating interim payments to the provinces under the Federal Provincial Arrangements and Established Programs Financing Act. In 1983-84, these payments will total over \$24 billion.

5.2 Our objective in examining the forecasting process in the Department of Finance was to assess the reasonableness and adequacy of management controls over the preparation of forecasts of the Canadian economy in light of the important uses made of these forecasts. Our examination focused on the forecasting activities of the Fiscal Policy and Economic Analysis Branch. We reviewed the procedures involved in generating the regular quarterly economic forecasts, the development of econometric models used to create these forecasts, and the supporting electronic data processing (EDP) services.

5.3 There was a clear and consistent understanding of the forecasting process on the part of those involved in the forecasting activities of the Department of Finance; however, the process is informal and relatively unstructured. For example, there are no written procedures describing the steps to be followed in preparing a forecast. The forecasting process as a whole is almost completely dependent on the professional calibre and continuity of the Department's staff at all levels. The absence of formal procedures and of any review to ensure that all steps in the process have been adequately performed introduces a fragility and potential inefficiency into Finance's forecasting activities. Moreover, it provides little assurance to management that its directions have been carried out and that, apart from its final review of the forecast itself, the forecast is an accurate reflection of management's initial directions. Failure to carry out all procedures could cause errors affecting the quality of the forecasts.

5.4 We noted that the Branch has started to address some of the deficiencies we observed, such as the need for better documentation of the steps involved. Although there are no specific target dates for completion, these initiatives should help to strengthen the forecasting process.

5.5 Although our audit did not attempt to assess the reliability of the Department's forecasts, there is little evidence of any systematic, periodic evaluation of forecast results by the Department. Periodic comparisons of forecasts as a whole to economic performance

would assist management in refining the forecasting process and in assessing the reliability of the forecasts.

5.6 There is a need for management practices and procedures governing the development of new and existing forecasting tools to reflect essential project control mechanisms, such as clearly defined and documented objectives, well understood research strategies, and performance reviews following each development segment.

5.7 The security over EDP systems and installations is weak. Unauthorized access to the latest forecast of the Canadian economy is possible. This could result in unauthorized release of the Department's outlook, with a subsequent impact on financial markets. The Department has made little progress in addressing many of the deficiencies identified in this area by the RCMP in 1979-80. The Department does not have a designated EDP co-ordinator or EDP policy. This could be a contributing factor in deficiencies noted in the co-ordination of EDP activities and also in EDP security.

Background

5.8 The Department of Finance generates regular, quarterly forecasts of Canada's economic performance. These forecasts are used within the Department as a basis for the federal government's economic and fiscal policies and for economic advice to Cabinet. Although the Department's forecasts are not generally circulated outside Finance, the Budget has traditionally included the latest departmental forecast. This budget forecast is regarded by other government departments and many private sector analysts as an authoritative forecast of the Canadian economy over the near future. As a result, the forecasts influence their own analyses and strategic decisions. The Department of Finance's forecasts thus have a significant effect on expectations of the future direction of the economy.

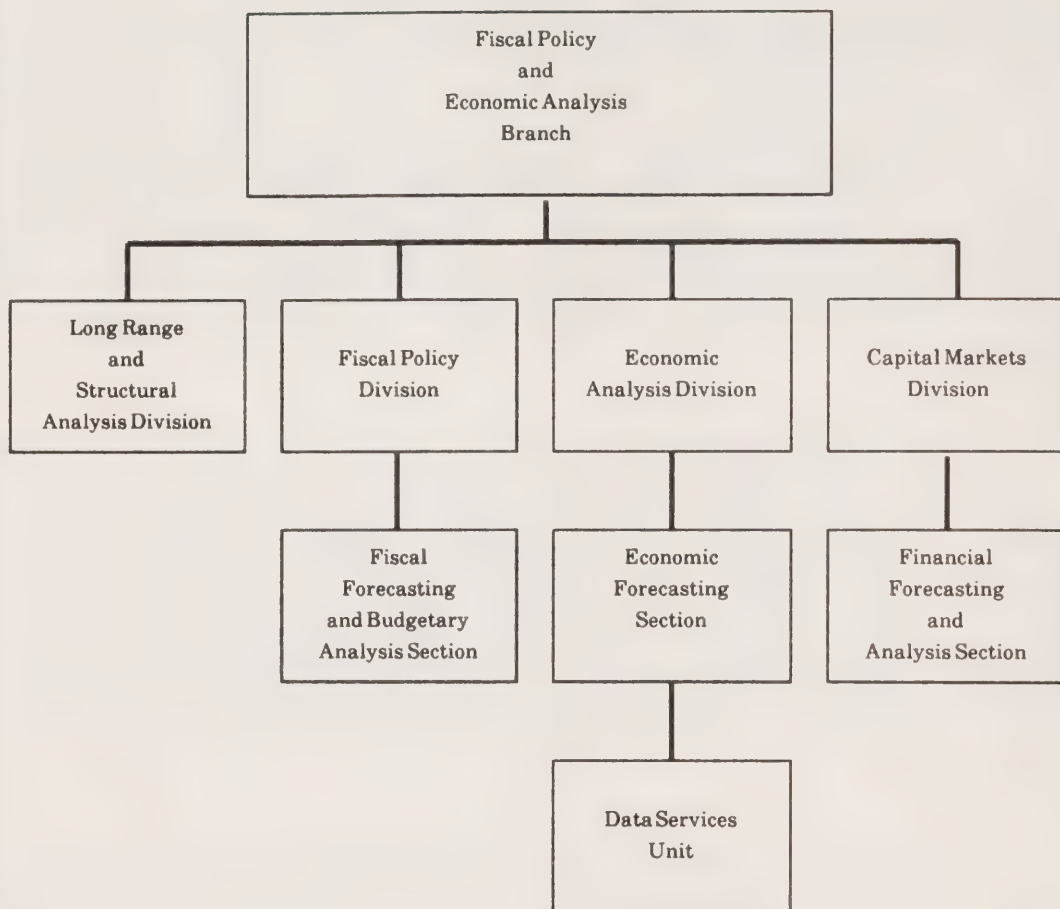
5.9 The forecasts prepared by Finance also have a tangible impact on the federal government's cash flow, since forecasts of key variables are used in calculating fiscal transfer payments and tax advances under the Federal-Provincial Arrangements and Established Programs Financing Act. In 1983-84, the federal government will transfer an estimated \$24 billion to the provinces under this legislation. The forecasts affect the interim payments under this Act. The final transfer in respect of any year is determined by actual historical data.

5.10 The forecasting activities within Finance are concentrated in the Fiscal Policy and Economic Analysis Branch. The Branch is composed of four policy and analysis divisions, one of which includes a data services support group, the Data Services Unit (see Exhibit 5.1). In each division, there is some econometric modelling capability to facilitate policy simulation or forecasting, or both, in relation to specific areas of interest, such as energy or tax policy. The primary current forecasting group, however, is within the Economic Analysis Division, and it is responsible for the co-ordination and preparation of the quarterly outlook for the Canadian economy. Other forecasting and modelling activities within the Branch are, in many cases, linked with this effort in that they provide input to the short-term forecast, use short-term forecast outputs or support the forecast in other ways.

5.11 The quarterly economic forecast is essentially a forecast of the main National Income and Expenditure aggregates as well as other important variables, such as the Consumer Price Index, unemployment and the balance of payments. From 1970 to 1980, the Economic Analysis Division co-ordinated preparation of the forecast, but there was no complete departmental econometric model. In mid-1980, the Branch introduced such a model, the Quarterly Forecasting and Simulation Model (QFS), which built on existing econometric blocks. This model now forms the core of economic forecasting activity within the Department of Finance. The use of computer resources enhances the speed, accuracy and efficiency of these activities.

5.12 The QFS model is essentially a set of econometric equations. It is based on historical and current data obtained from sources external to the model, such as the Statistics Canada database, assumptions and internally-generated data. The products of this

ORGANIZATION OF MAJOR CURRENT FORECASTING ACTIVITIES



Note: Only those sections which are heavily involved in the Department's current forecasting activities are shown.

type of modelling activity are forecasts or estimated values of key variables of the Canadian economy, such as Gross National Product, unemployment, and balance of trade.

5.13 Econometric models such as the QFS are tools to assist in better forecasting and simulation. The final product, a set of forecasts, is highly dependent on the judgement of those using the models. In forecasting, there is no such thing as a perfect model and it should not be expected. Department personnel accept, however, that it is their responsibility to develop the best possible forecasting tools with the resources available. Improving econometric modelling is a continuing project in the Department.

Audit Scope

5.14 We examined management controls within the Department of Finance over the preparation of forecasts of the Canadian economy. In particular, we were interested in the controls over those figures used as the basis for calculating interim advances and transfers to the provinces. These activities are concentrated within the Fiscal Policy and Economic Analysis Branch and, in particular, within the Economic Analysis and Fiscal Policy Divisions. We traced key linkages to other branches in the Department, such as Federal-Provincial Relations, Social Policy and Administration.

5.15 Our audit concentrated on the Department's main forecasting tool, the Quarterly Forecasting and Simulation Model (QFS), and, to a lesser degree, on the linked tax models and the Public Debt Model. The audit covered three major aspects of the Department's forecasting activities:

- *the forecasting process*: procedures for the review of data inputs, the method of generating a forecast of the Canadian economy, and the evaluation of forecast outputs;
- *the forecasting tools*: procedures for initial and ongoing development and maintenance; and
- *electronic data processing*: acquisition, security and organization.

5.16 We examined the procedures used to produce, verify and evaluate the short-term forecast and the management controls over these procedures. We did not assess the quality of the forecast or the theoretical basis underlying the main econometric model, the QFS.

Observations and Recommendations

The Forecasting Process

5.17 The forecasting process is a co-operative, interdivisional effort, orchestrated by the forecast co-ordinator of the Economic Forecasting Unit. The process requires substantial

co-ordination of activities in various divisions within the Fiscal Policy and Economic Analysis Branch. The forecast begins when analysts prepare and submit assumptions to branch management for approval. These assumptions are the Department's best estimates of aspects of the economy which are not produced by the forecast itself, such as the outlook for the United States economy, and energy prices. This step is followed by updating data banks and running the model to produce a forecast. The forecast is then circulated throughout the Branch to allow analysts to review the results and make any necessary modifications. The model is then run again to produce a second, improved forecast. This process continues until a final forecast meets division and branch management approval. It is then sent for approval at the senior departmental management level.

5.18 Exhibit 5.2 depicts the phases of the forecasting cycle. At the time of our audit, Finance was not able to provide us with any written procedures describing the elements of the forecasting cycle and responsibilities for data input, processing, and review and distribution of forecast outputs. Individuals in the Branch had a clear and consistent understanding of each step of the forecasting process and their respective roles. Responsibilities, approvals and review procedures were, however, communicated verbally. There was no documented structure for ensuring that each phase was carried out at the appropriate time and that forecast inputs and outputs were reviewed and approved. There was no clear written delineation of responsibilities nor was there evidence indicating that procedures described to us were followed. Completion of these procedures depends wholly on the diligence, integrity and competence of those persons responsible for the forecasts.

5.19 Failure to perform all necessary procedures at the required time could precipitate errors that could affect the quality of the forecast. Moreover, forecasts are typically prepared under significant time pressure; written procedures could contribute to a more efficient operation in that individual analysts would have identified and commonly understood responsibilities. They would also help orient new staff members, who currently must learn the process through observation, experience and guidance from others, as well as help protect the continuity of the process. Finance has prepared a draft of such procedures since we completed our audit.

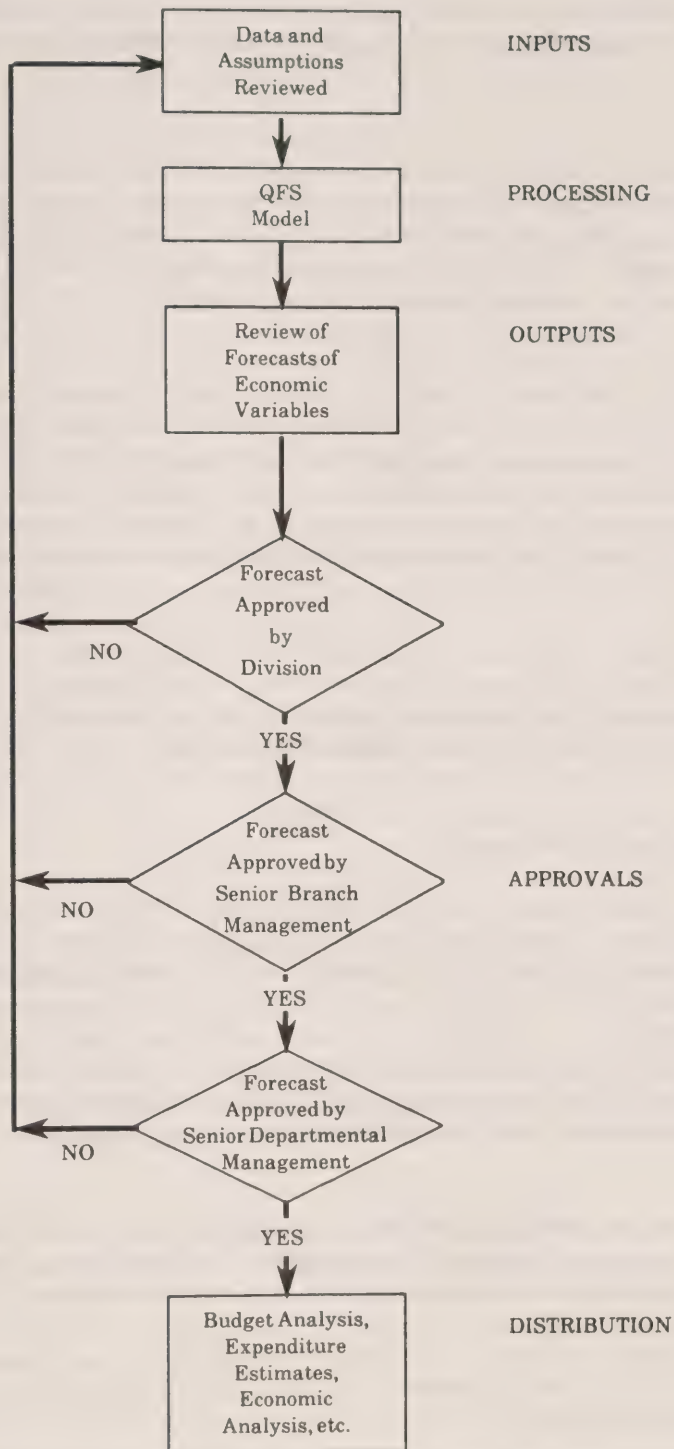
5.20 The Department should ensure that:

- **its written procedures cover review and approval of assumptions, data inputs, forecast outputs and their distribution;**
- **instructions for the forecasting process provide sufficient detail to clearly establish key processing steps and individual responsibilities;**
- **there are checkpoints identified such that management can be assured that these procedures have been followed; and**
- **these procedures are implemented.**

Department's response: Action has already been taken on drafting procedures for the forecasting process.

Exhibit 5.2

THE FORECASTING CYCLE



Evaluation of the Forecasts

5.21 Standard practice within the econometrics field requires testing econometric models for their predictive capabilities before they are implemented as regular forecasting tools. Once implemented, models are then usually evaluated on both an ongoing and a periodic basis to determine if their structure remains valid and their predictive capability is acceptable over time.

5.22 In the Department of Finance, the individual sector analysts, in conjunction with their section chiefs, are responsible for comparing forecasts of specific variables to actual results as part of the preparation of input for a forecast. The forecast's key variables are also compared with forecasts by other groups, such as the Bank of Canada, before being finalized. However, no records are kept of this analysis.

5.23 The QFS model is relatively new and went through substantial testing before being introduced. Despite recent major changes to the model, we found little documentation to show that the predictive capability of the model as a whole had been formally assessed on a regular basis since its introduction. A more formal assessment would help to identify areas where development should be concentrated. As well, it would give Finance further assurance on the quality of its forecasts to supplement the ongoing scrutiny by analysts and senior managers.

5.24 **The Department should develop and implement formal procedures to evaluate regularly the predictive capability of its forecasting models, including a periodic internal review of their continuing integrity.**

Development and Maintenance

5.25 Although the development proposal for the QFS was preceded by an internal review, there is no formal requirement that major development proposals be assessed formally for feasibility, including consideration of objectives, compatibility with existing work, resources and timing. In the case of the QFS, the preliminary assessment looked into alternative options for acquiring an in-house modelling capability and its impact on the Branch's performance in forecasting and simulation, but did not assess the impact in terms of ongoing costs. There is no documentation available to indicate that development of the other branch models had been assessed for feasibility and approved.

5.26 **Major projects should be preceded by a feasibility study, including objectives, proposed strategy, compatibility with existing work, resources and timing. Formal approval should be given prior to development.**

Department's response: The newly re-established Branch Model Development Committee will be responsible for advising on the implementation of major development projects.

5.27 Ongoing econometric research to upgrade the forecast tools, the QFS in particular, is directed by Branch section chiefs and their assistants who meet after each forecasting cycle to discuss problems, identify projects, set priorities and assign responsibilities. For all development activity, whether it is to create a new model such as the QFS or to refine existing models, there is a reliance on a peer review process whereby individual analysts throughout the Branch are expected to critique each other's work. In the case of QFS's initial development which was concentrated in the summer of 1980, there was a rigorous structure for the co-ordination of this peer review process under a Branch Model Development Committee (BMDC) which was established specifically for this purpose. This Committee was responsible for the ultimate theoretical soundness of the QFS, and it directed the assembling of existing econometric blocks, identified gaps and steered research toward eliminating them. This Committee was dissolved after the QFS was implemented. The peer review process for other research and development activities is not structured, and there is no documentation to show that the results of such research are reviewed and approved by management prior to implementation. Such a review would help ensure that individual projects are compatible with other analyses and in line with Branch objectives.

5.28 Although individual analysts had a common and consistent knowledge of the steps to undertake in model-based research, there were no written procedures describing standard items to be addressed in econometric research, such as objectives, data sources and limitations, required testing and approvals. The Department has recently prepared a list which includes some of these items. At the time of the audit, the model co-ordinator in the Economic Analysis Division reviewed and tested all proposed refinements to the QFS prior to implementation, but the extent of testing was at the co-ordinator's discretion.

5.29 We believe that written procedures would be useful in providing a guide and a checklist for analysts to follow. They would not, of course, be a substitute for an individual analyst's imagination, initiative and competence, upon which successful econometric research depends.

5.30 Management should prepare written procedures for econometric research projects, including documentation, testing, implementation, approvals and post-implementation review.

5.31 Consideration should be given to establishing a structure similar to the Branch Model Development Committee to co-ordinate and review econometric research.

Department's response: It has been decided to re-establish the Branch Model Development Committee. It will be constituted at the Director level and chaired by the Director of Economic Forecasting. It will be responsible for, among other things, advising on the implementation of major development projects as recommended earlier.

Documentation

5.32 Documentation supporting the QFS model, its testing and operation was minimal at the time of our audit. The same situation applied to the tax and public debt models, although documentation was being prepared for the tax models. There were no central archives of all technical papers supporting the QFS model's development process after the initial development period. Existing documentation essentially consisted of technical papers held by each analyst, the model and its latest forecast maintained on computer, and a brief overview of the model's structure, prepared in March 1982. At the time of our audit, the most complete, recent description of the model and its properties was a paper for the comparative models seminar initiated by Finance and the Bank of Canada.

5.33 The current lack of adequate documentation concerning the development of the forecasting tools, their testing and ongoing review may limit management's ability to maintain and revise efficiently its modelling and forecasting capabilities. In addition, inefficiencies in operating such models are likely to arise, particularly when staff turnover or absences occur. In the event of staff leaving the Department, inadequate documentation would make it difficult for management to maintain continuity. The Department has started to prepare some documentation. This would enhance the efficiency and stability of the forecasting process.

5.34 Complete documentation of the forecasting models should be developed and maintained in a central location, supported by a chronological file of previous development papers.

Department's response: Action has already been taken on preparing comprehensive documentation on the Department's QFS macroeconomic model and a first draft, prepared in April 1983 was made available to the Audit team.

In response to the six recommendations in paragraphs 5.20, 5.24, 5.26, 5.30, 5.31 and 5.34, the Department has decided to establish an Economic Forecasting Division within the Fiscal Policy and Economic Analysis Branch, primarily through the re-allocation of person-years from elsewhere in the Department. The establishment of this Division, which will be headed by a Director of Economic Forecasting, will provide greater focus to the management and co-ordination of the forecasting process and to the development, documentation and effective dissemination of forecasting methodologies. The specific recommendations are being carefully examined in the context of defining the mandate of this division, and appropriate action will be taken to formalize existing procedures and to develop additional practices as recommended.

Electronic Data Processing

5.35 Electronic data processing contributes significantly to an effective and efficient econometric forecasting operation. For this reason, we included EDP in the scope of the audit. Some of the issues which we addressed, however, are Department-wide in nature and

are not limited to the forecasting process alone. EDP expenditures for 1982-83 for the Department as a whole were estimated at \$2.1 million. Of this, \$1.6 million (77 per cent) was used by Fiscal Policy and Economic Analysis in its forecasting, simulation and analytic work, and its provision of data services to the rest of the Department.

5.36 Policy, organization and acquisition. There is no published departmental EDP policy, as required by Treasury Board. Such a policy would cover the provision, administration and control of EDP services and would identify organizational roles and responsibilities. This is a factor in at least some of the problems identified by the RCMP's inspection report, discussed below. Similarly, there is no officially designated EDP co-ordinator, as recommended by Treasury Board. The creation of such a position could reduce the likelihood of co-ordination problems and duplication of effort between the Fiscal Policy and Economic Analysis Branch and the Administration Branch. The former, for historical reasons, is the centre of the Department's EDP expertise, while the latter provides EDP services to Treasury Board and the Office of the Comptroller General as well as to the Department of Finance. In December 1982, the Administration Branch proposed a strategic plan for information processing in Finance. The proposal addressed organizational, technological and control issues, but no decisions have been taken on the proposal.

5.37 We found that the process for acquiring computer hardware, software and services has functioned adequately in the past in that the manager of the Data Services Unit within the Fiscal Policy and Economic Analysis Branch has assumed the role of EDP co-ordinator for the relatively few acquisitions that the Department has made. However, the Administration Branch is considering acquiring in-house computer equipment. Because neither the Administration Branch nor the Data Services Unit has clear and total authority for acquisition functions, the existence of the two separate systems groups with overlapping responsibilities and unclear mandates could contribute to a lack of co-ordination of EDP services.

5.38 A departmental EDP policy should be developed covering all aspects of EDP activities within the Department, including acquisitions, security, and operational and administrative procedures.

5.39 The Department of Finance should formally designate an EDP co-ordinator having the responsibilities set out in the Treasury Board Administrative Policy Manual.

5.40 The present organizational structure for providing EDP services should be re-examined with a view to co-ordinating the responsibilities for departmental EDP activities.

Department's response: In response to the recommendations 5.38, 5.39 and 5.40, internal proposals for ensuring that responsibilities for departmental EDP activities are effectively co-ordinated, that an EDP co-ordinator is formally

designated and that a departmental EDP policy is developed, are currently being reviewed by the Department's Management Advisory Committee.

5.41 Security. In August 1980, the RCMP submitted a security evaluation report to the Department on its data processing operations and activities. The evaluation covered all security-related aspects of the computer operation, including organizational, administrative, personnel and environmental considerations, as well as communications, software, and operations. The security evaluation report, the summary volume of which was sent direct to the Deputy Minister, indicated that the facilities and systems in place did not satisfy the requirements for secure processing.

5.42 The problems identified by this report constituted a serious threat to the security of the Department's data processing. They also indicated a lack of compliance with Treasury Board policies. Treasury Board also requires that, after completion of such an evaluation, departments respond within six months on the actions taken to correct identified problems. In October 1981, 14 months after receiving the evaluation report, the Department sent a status report to Treasury Board. In July 1982, the Department sent an update, indicating that 43 of the 79 recommendations were implemented or required no further action. All 36 of the outstanding recommendations at that date related to requirements for developing EDP security policies, procedures and standards. These were still outstanding at the time of our audit.

5.43 The Department should review the outstanding security recommendations and take any necessary action to correct the deficiencies noted.

Department's response: The recent acquisition of modest in-house data processing capability has increased the Department's ability to respond to the outstanding security recommendations, and these are being reviewed.

5.44 Our audit also showed that 6 of the 43 recommendations noted as implemented or as requiring no further improvement still needed further action. The most significant of these concerned procedures to ensure that former employees cannot access confidential information stored on the computer system. This is important because the system on which the economic forecasts are stored is protected through a system of account numbers, passwords and computer control software. Although the model structure itself appeared adequately protected from tampering, individual sector analysts may access the model and its solution to read or copy the model logic or solution. At the time of our audit, there was no formal procedure to delete the account numbers or passwords of former employees, and there was no automatic mechanism for notifying the manager of Data Services of an employee's departure so that appropriate precautions might be taken. Failure to delete passwords of former employees allows unauthorized access and release of the forecast. For example, an individual with access to a compatible terminal remote from the Department would have access to Finance's latest forecast solution.

5.45 The Department should implement procedures to ensure against unauthorized access to sensitive information.

Department's response: Administrative procedures have been put in place to protect against the possibilities of unauthorized access to sensitive data by former employees.

5.46 Physical security is also loosely controlled. On more than one occasion, we observed that terminal rooms were left empty, unlocked and open to access by unauthorized personnel. This lack of security provides potential for damage to machines, interference with processing, and access to confidential material.

5.47 The Department should strengthen its physical security arrangements.

5.48 The Departmental Security Officer is responsible for maintaining lists of locations of computer hardware for physical security purposes. Because computer terminals have been installed without his knowledge, he informed us that he could not ensure that proper precautions were taken to protect new installations against unauthorized access.

5.49 As part of the formal acquisition process, the Departmental Security Officer should be informed of intended equipment acquisitions so that appropriate security and environmental precautions can be taken.

Department's response: Administrative procedures have been put in place to comply with this recommendation.

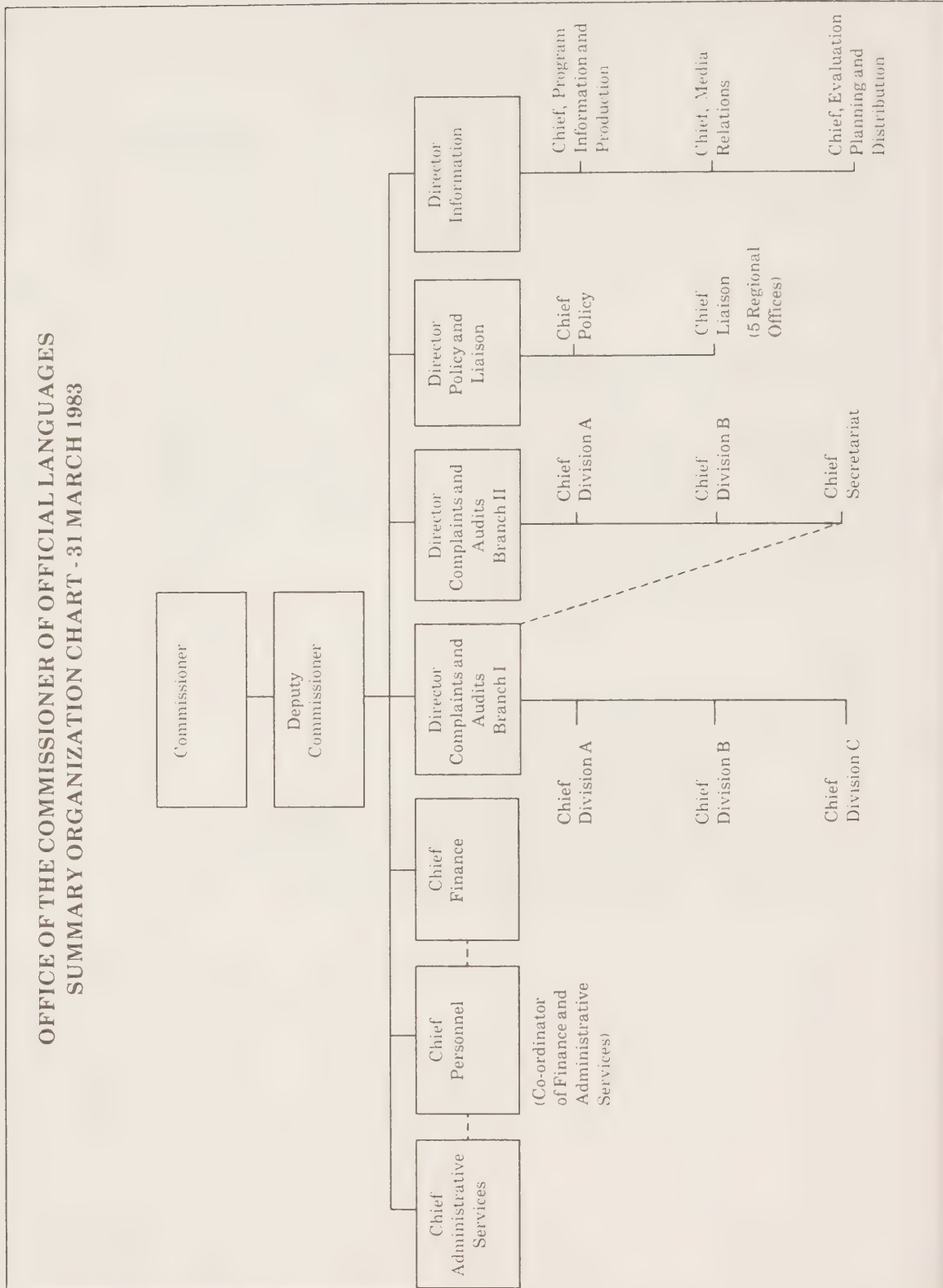
In response to the recommendations in paragraphs 5.43, 5.45, 5.47 and 5.49, a complete resolution of the issues raised in these recommendations will have to await the development of departmental policies and structures for EDP operations, as well as the pending relocation of the Department to new facilities.

OFFICE OF THE COMMISSIONER OF OFFICIAL LANGUAGES

COMMISSIONER OF OFFICIAL LANGUAGES

Table of Contents

	Paragraph	Page
SYNOPSIS	6.1	193
Audit Scope	6.15	198
Observations and Recommendations		
The Commissioner's Mandate	6.17	198
Planning	6.26	200
Complaints and Audits Program	6.30	201
Information Program	6.42	204
Policy Analysis and Liaison Program	6.47	205
Program Evaluation	6.51	207
Information Systems and Efficiency	6.57	208
Information to Parliament	6.61	208
Exhibits		
6.1 Summary Organization Chart		192
6.2 Distribution of Expenditures and Person-years 1971-72 and 1982-83		194
6.3 Estimates for Federal Official Languages Programs		196
6.4 Estimates and Supplementary Estimates, 1975 to 1983		199
6.5 Numerical Distribution of Complaints from 1975 to 1982		202
6.6 Regional Offices and Official Language Minorities		206



COMMISSIONER OF OFFICIAL LANGUAGES

SYNOPSIS

6.1 Commissioner's mandate. The Commissioner, who is an officer of Parliament, has the objectives of ensuring that the public can communicate with and obtain services from federal departments and agencies in both official languages, that federal employees can work in the official language of their choice, and that the two official language groups participate equitably in the public service of Canada. These objectives were set by legislation and by a 1973 Parliamentary Resolution clarifying the legislation's intent with respect to federal employees' rights concerning language of work.

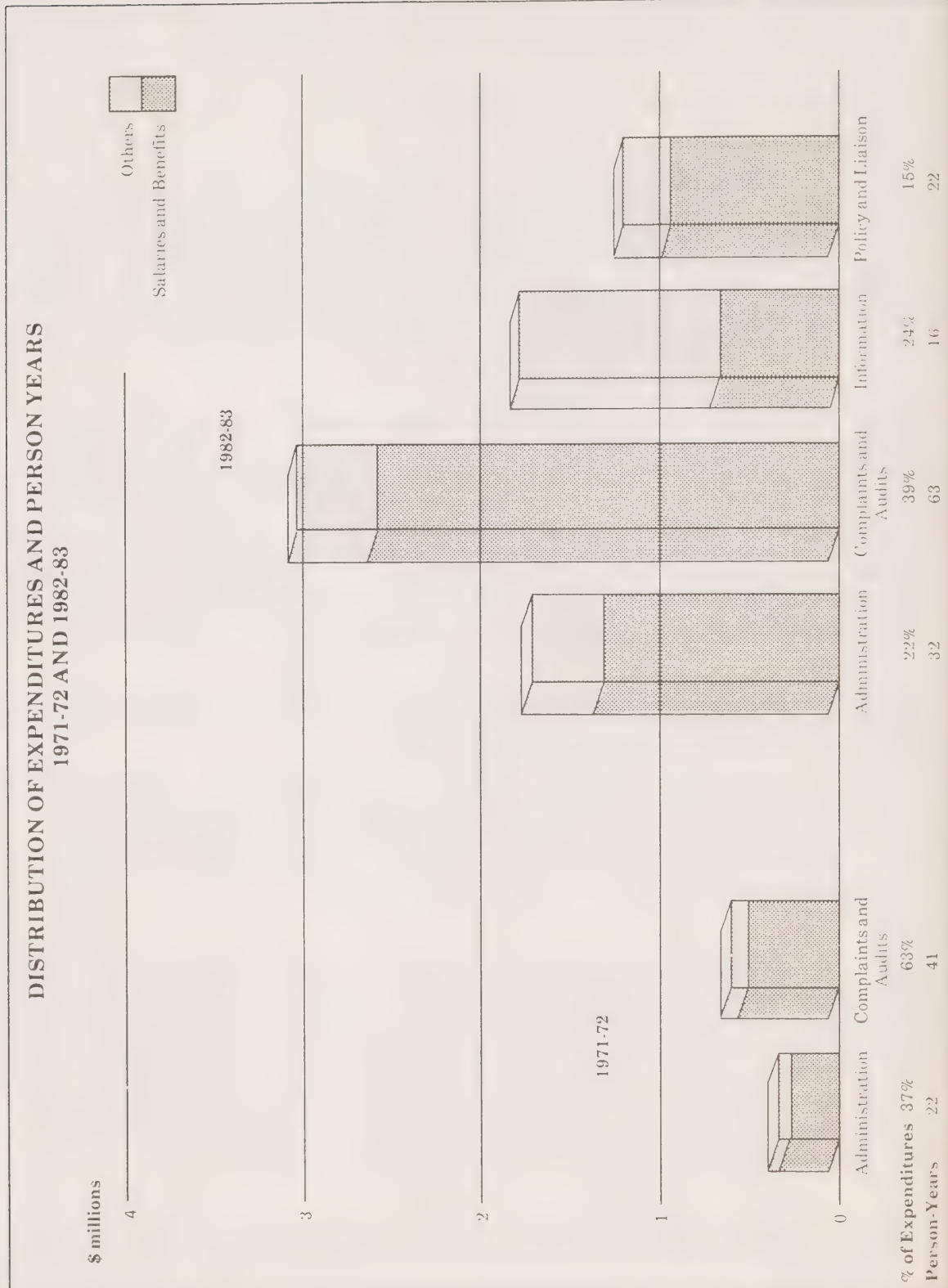
6.2 To achieve these objectives, the Commissioner has increased his activities. In the early 1970s, his roles were those of linguistic ombudsman and linguistic auditor of federal institutions; over the years he has broadened his field of action by taking on the role of promoter of language reform, even in areas not strictly within federal jurisdiction. The very broad and general nature of the mandate and the increase in the Commissioner's activities resulted in overlapping responsibilities with other federal agencies concerned with the official languages issue. Some duplication of activities is inevitable if the Commissioner is to maintain his independence in regard to these agencies; however, it is desirable to ensure that this duplication is minimized as far as possible under the circumstances.

6.3 Organization. The Official Languages Act, passed in 1969, established the position of Commissioner and set out the following duties:

It is the duty of the Commissioner to take all actions and measures within his authority with a view to ensuring recognition of the status of each of the official languages and compliance with the spirit and intent of this Act in the administration of the affairs of the institutions of the Parliament and Government of Canada.

6.4 To carry out this mandate, the Commissioner has divided his activities among four operational branches, assisted by three support services. Exhibit 6.1 sets out this organization. The distribution of expenditures and person-years among the programs of the Office of the Commissioner of Official Languages (OCOL) is shown in Exhibit 6.2. The OCOL had 133 person-years and a budget of \$7.8 million for the 1982-83 fiscal year. This represents 1.7 per cent of the estimated \$453 million earmarked for federal official languages programs, as summarized in Exhibit 6.3. The three major operational sectors are Complaints and Audits, Information, and Policy Analysis and Liaison.

6.5 Complaints and Audits Program. The two Complaints and Audits Branches assist the Commissioner in his duties as ombudsman and linguistic auditor. Since 1970, the



OCOL has investigated nearly 13,600 complaints. In a high percentage of cases, these complaints have been resolved. However, there has been no systematic analysis of the nature and complexity of complaints to assess any changes in their nature, the effects of this program and the adequacy of the resources devoted to it.

6.6 In 1982, the two branches undertook 22 linguistic audits in the federal government to provide senior officials of the entities concerned with information on weaknesses in the area of official languages and the corrective action required. They also carried out brief studies in more than 90 federal government entities. The findings are described in the Commissioner's Annual Report. The audit activity is an important part of the active strategy established by the Commissioner. The OCOL, however, has not standardized its procedures for linguistic audits by providing an audit manual. Such a manual would be useful both for training new officers and promoting uniformity in the audit approach. The OCOL has not developed valid indicators for evaluating the effectiveness of its audits, including the extent to which its recommendations have been followed.

6.7 Information Program. The Commissioner's objective is to make the Canadian public aware of Canada's linguistic situation and to provide information on the provisions and spirit of the Official Languages Act. To achieve this, he has established a program directed to certain segments of the population. The Information Branch provides printed and audio-visual material to federal employees, language minorities and the Canadian public in general. In the past four years, an average of 69 per cent of the Information program's expenditure has been aimed at young people between the ages of 7 and 17. The OCOL's statistics show that nearly three million language kits have been distributed across Canada since 1975. The design, production and distribution costs for the kits during that time came to a total of approximately \$7 million. Although the demand for the kits proves that they have been received favourably by the public, no systematic study has been conducted of the market for these and other information tools or of possible alternative ways of reaching that market.

6.8 Policy Analysis and Liaison Program. Under this program, two major services are provided involving quite different activities. Policy Analysis provides the Commissioner with analysis and advice on bilingualism matters and contributes to the Annual Report and other OCOL documents. This division undertakes research and analytical projects in response to requests from the Commissioner and his senior officials. Given the relatively small size of the sector and the nature of its operations, the limited planning that is done appears to meet operational needs.

6.9 Liaison is carried out by the five regional offices. The primary objective set for these offices by the Commissioner is to promote official languages and language reform through continued efforts by OCOL representatives across Canada. Analysis of the geographic distribution of official languages minority groups in Canada shows that the regional offices are appropriately located. However, the regional offices have not been staffed systematically in accordance with the requirements for each region.

SPENDING ESTIMATES FEDERAL PROGRAMS--OFFICIAL LANGUAGES FISCAL YEAR 1982-83 (in millions of dollars)		\$
Secretary of State		
Grants and operating expenditures		202
Translation Bureau		77
Public Service Commission		
Language training and other activities		35
Treasury Board		
Official Languages Branch		4
Other departments and agencies		<u>127</u>
	Sub-total	445
Commissioner of Official Languages		<u>8</u>
	Total	<u><u>453</u></u>

6.10 Program evaluation. The OCOL has conducted program evaluations of the three language kits it has produced, and an evaluation of the magazine *Languages and Society* is in progress. The completed evaluations have been used to improve the content of the kits and to support a request to continue the activity. However, the scope of these studies was limited and did not include consideration of the rationale for the activity and the contribution it makes to achieving the Commissioner's ultimate objectives or assess alternative ways of achieving these goals.

6.11 The OCOL has not established any systematic procedures or plans for evaluating its programs. All the program evaluations thus far have focused on information activities, and other areas have not been evaluated or scheduled for evaluation.

6.12 Information systems. Financial information from the Department of Supply and Services - Services Administration and the OCOL's microcomputer provided adequate support for financial control by management. However, the OCOL has no system for providing information on the utilization of its human resources and no standards to which actual use could be compared when reasonable to do so. As a result, managers lack the information they need to properly evaluate employees' performance and the efficiency with which OCOL activities are being carried out.

6.13 Information to Parliament. The Commissioner keeps Parliament well informed about his activities, not only through the Main and Supplementary Estimates, but also through the Annual Report. This report, submitted to the House of Commons and the Senate, describes the OCOL's activities and accomplishments and summarizes the linguistic situation in federal institutions.

6.14 The OCOL's participation in the work of the Special Joint Committee of the Senate and the House of Commons on Official Languages also helps keep Parliament informed. The Committee, which has been active since autumn 1980, has proved to be an important link between the OCOL and Parliament.

Audit Scope

6.15 In March 1982, the Commissioner of Official Languages requested that the Auditor General conduct a comprehensive audit of the OCOL. We examined the systems and procedures in place in the operational programs – Complaints and Audits, Information, and Policy Analysis and Liaison. Our audit was designed to determine whether the OCOL was taking economy and efficiency into account in managing its programs and whether it had satisfactory mechanisms for measuring and reporting the effectiveness of its major programs, where reasonable and applicable.

6.16 Consequently, we focused on strategic and operational planning and operational management of the major activities carried out in Ottawa and the regional offices. We also examined evaluation of programs, human resource management, and information systems.

Observations and Recommendations

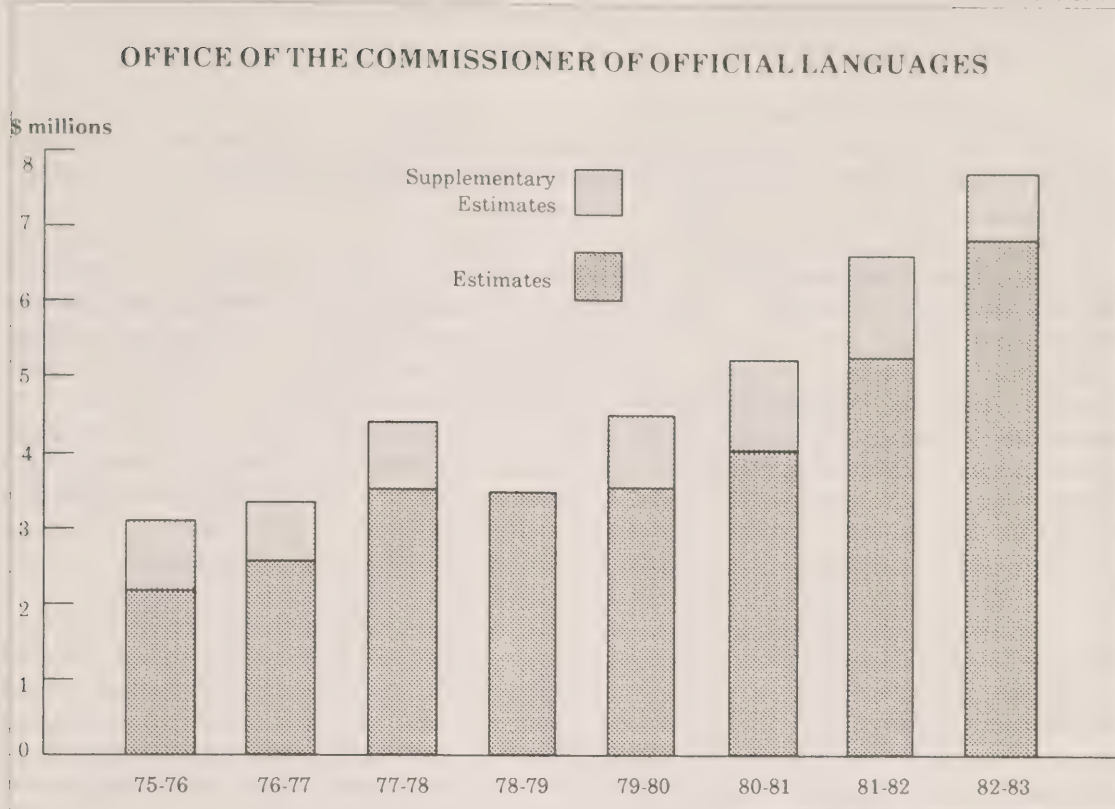
The Commissioner's Mandate

6.17 Official Languages Act. In passing this Act in 1969, Parliament gave the Commissioner the task of ensuring recognition of the status of the two official languages in federal institutions and compliance with the spirit and intent of the legislation. The Commissioner's duties and powers with respect to investigating complaints and reporting on the discharge of his duties are well defined in the Act. However, the scope of his other duties is not defined – the Act says that the Commissioner can take all actions and measures within the authority provided in his mandate.

6.18 The special status of the Commissioner complicates the Treasury Board Secretariat's task of approving new initiatives and requests for resources. It is one of the reasons for Supplementary Estimates having been needed nearly every year since 1975, as illustrated in Exhibit 6.4. Supplementary Estimates have represented a substantial portion of the budget for the Information and Liaison programs. The delays in allocation of funds have hindered planning and operation of these programs.

6.19 Evolution of roles. Since the early 1970s, the Commissioner has increased the number and level and number of his activities. Maintaining his original role as ombudsman, which is well defined in the Official Languages Act, he took on the role of linguistic auditor as well. The Act covers the public's rights regarding language of service but is less clear about the language of work. In 1973, a Parliamentary Resolution on Official Languages in the Public Service of Canada defined the rights of employees concerning language of work. It clarified the legislation's intent and, indirectly, the scope of the Commissioner's duties with respect to the rights of federal employees to work in the official language of their choice and equitable participation of the two linguistic groups in the public service of Canada.

Exhibit 6.4



6.20 The Commissioner further expanded the scope of his mandate by becoming a promoter of language reform. This gave rise to new activities, particularly in the areas of information, liaison and policy analysis. These activities are concerned not only with bilingualism in the federal public service, but also with areas such as education and minority media.

6.21 In general, the mandate as interpreted by the Commissioner, the objectives of the program, and the OCOL's activities are related to one another and to the Official Languages Act in a reasonable and logical way. The OCOL has also kept Parliament well informed on the discharge of its duties and its new initiatives.

6.22 Mandates of other federal organizations. Several federal organizations have integrated objectives and activities related to applying the Official Languages Act in their programs:

- The Treasury Board Secretariat's Official Languages Branch is responsible for developing federal government policies, ensuring their implementation and evaluating how effectively these policies are carried out in regard to the provisions of the Official Languages Act for the public service.

- The Secretary of State administers bilingualism programs in the areas of education and public administration for minority official language groups and the private sector.
- The Public Service Commission promotes equitable participation by both official language groups in the public service and investigates complaints about employment situations which contravene the Public Service Employment Act.

6.23 Because some of these objectives are similar to those of the OCOL, there is a certain amount of overlap in activities, such as auditing and assessing progress in bilingualism matters and carrying out information programs. Some effort has been made to reduce this overlap. At the end of 1982, the OCOL undertook to co-ordinate the audit schedule with the Treasury Board Secretariat and the Public Service Commission to minimize duplication of linguistic audits in the same year. Some overlap is inevitable if the Commissioner of Official Languages is to retain independence in ensuring that federal institutions comply with the Act; however, the extent to which it can be kept to a minimum should be determined. In the areas of information and liaison with minority language groups, it appears particularly pressing to clarify the respective responsibilities.

6.24 The Treasury Board Secretariat has a double role in this – through its Official Languages Branch, as already mentioned, and also through its Program Branch, which studies and approves the OCOL's resource requests and new initiatives. A conflict of interest may arise within the Secretariat when it must settle unresolved questions of overlapping responsibility. At present, there is unofficial consultation at the management level between the two bodies.

6.25 The respective roles of the OCOL and other federal institutions in applying the Official Languages Act should be clarified to minimize duplication of work and to prevent a situation which could affect the OCOL's credibility and independence and the responsibilities of the federal institutions concerned.

Management's comments: The Office of the Commissioner of Official Languages recognizes the need for greater specification of the roles played by it and by other federal institutions in relation to official languages, and it hopes that the recommendations of the Special Joint Committee on Official Languages will help to meet this need.

Planning

6.26 The planning process provides the OCOL with a framework for reviewing its present functions and developing new activities. This framework links the OCOL's interpretation of its mandate with the means it can use to satisfy new requirements.

6.27 The OCOL is not required to submit a report to the central agencies on its overall strategy. There is no official strategic plan for the OCOL as a whole. However,

changes in policies and program orientation must be communicated to central agencies. Some submissions to Treasury Board include long-term strategies for some activity sectors, and the OCOL carries out a periodic analysis of its environment to set the direction of its programs.

6.28 An overall strategic plan incorporating these various elements would facilitate the co-ordination of the Commissioner's activities, which could simplify the approval of additional resources and reduce the delays that have hampered operations in the past. Such a document would also serve as a "corporate memory" of discussions and managerial decisions on strategy and as a means of communication with managers responsible for developing and implementing operational plans.

6.29 The OCOL should prepare its strategic planning in a formal document that defines its priorities. This should then be used as a basis for more detailed operational planning.

Management's comments: It is the Official Languages Act which determines the OCOL's mandate and role, particularly in the area of audits. The OCOL is therefore not obliged to present its strategic overview to the central agencies. Nevertheless, the OCOL agrees to review its strategic planning and prepare an appropriate report.

Complaints and Audits Program

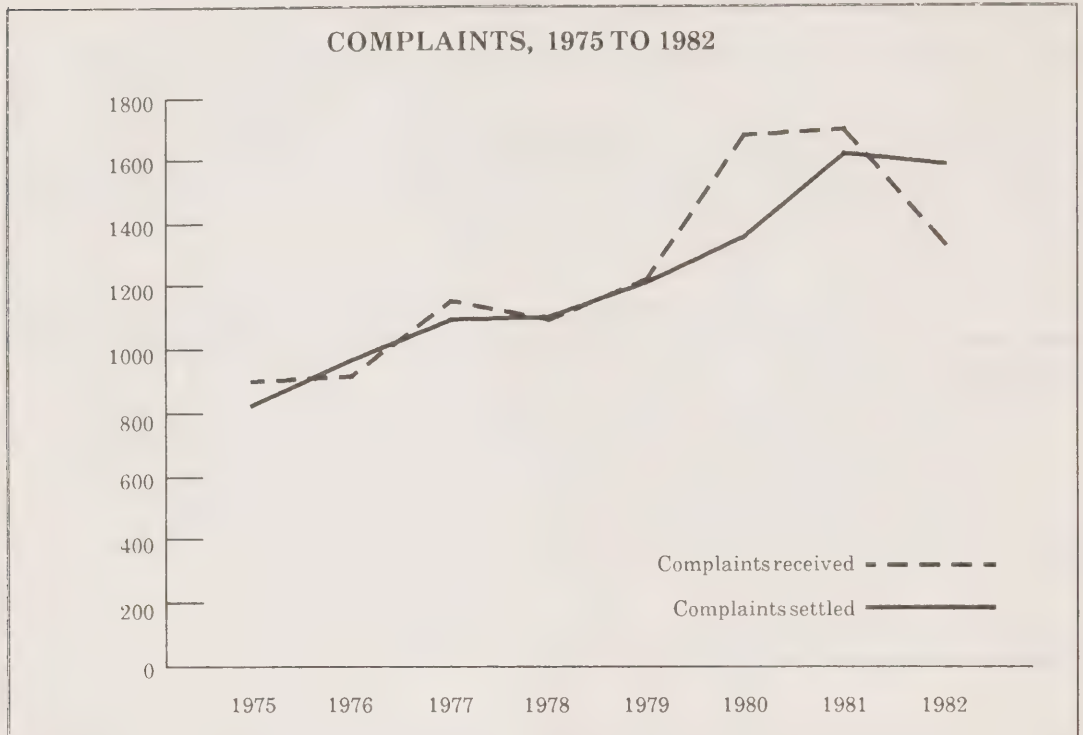
6.30 Two branches share responsibility for this program. Because communication is good and operations are limited in scale, the two branches achieve a satisfactory degree of co-ordination and consistency in their operational practices and plans of action. They estimate that some 30 per cent of their person-years are assigned to complaint investigation, 60 per cent to auditing and the rest to administrative duties. However, this estimate is not based on any substantive information.

6.31 **Investigation of complaints.** Since the OCOL began operations in 1970, it has investigated nearly 13,600 complaints; 400 were unresolved as of 31 March 1983. Exhibit 6.5 indicates the number of complaints received and settled from the beginning of 1975 to the end of 1982. The Secretariat manually gathers statistics on the origins of the complaints and the institutions concerned, and on whether language of service or language of work is involved. However, the complaints are not classified according to their complexity, nature or relative importance. Consequently, each case is given the same consideration, even though many are repetitive and investigating them is routine.

6.32 OCOL uses the number of complaints for which investigation has been completed as a performance indicator. In its present form, this indicator gives only an approximate idea of the OCOL's level of activity in this area. Without proper information on the nature and complexity of the complaints received and the way they are resolved,

management cannot analyse complaints systematically to evaluate the effects of investigations and determine what human resources should be devoted to this activity.

Exhibit 6.5



6.33 During our audit we conducted, in co-operation with management, a mail survey covering the 595 persons who made one complaint or more in 1982 and identified themselves. We were fortunate to obtain a response rate of 52 per cent considering that we could not carry out any follow-up on the non-respondents due to the anonymity of the survey. However, this response factor does leave open the possibility of a bias in the results achieved. Analysis of the 309 answers received revealed a high level of satisfaction with the complaints service provided by the OCOL. With the exception of one region where the answers indicated that only 65 per cent were satisfied, between 79 and 87 per cent of people answering were satisfied with the manner in which the Office dealt with their complaints.

6.34 Complaints, as well as the legal notices necessary for resolving complex cases, are filed chronologically. Because of the rudimentary manual filing system, it is difficult for the Secretariat to locate similar complaints from past years. A complete and handy reference system would improve the accessibility of past complaints of a similar nature, and staff would be able to speed up the resolution process by avoiding duplication of research work.

6.35 The OCOL should classify complaints by nature and complexity to make possible more detailed evaluation of the complaints component of the program.

6.36 To ensure uniformity in resolving similar cases and to improve efficiency, the OCOL should develop a filing system that would allow for rapid reference to previous complaints.

Management's comments: The OCOL has begun setting up a computerized system which should make it possible to study complaints by category.

6.37 **Linguistic audits.** The Official Languages Act gives the Commissioner authority to carry out such inquiries as he sees fit. He can thus assume the role of auditor to ensure that all federal bodies comply with the Act and to evaluate their progress in the area of language reform.

6.38 During 1982-83, the Complaints and Audits program established most of its existing control mechanisms. These are now adequate to ensure that the various steps in the audit process are carried out. Moreover, the recent involvement of the Chief of the Secretariat serving the two branches in the control process should increase the importance attached to adhering to schedules and contribute to providing more complete and timely management information. The methodology used in the audits is taken from administration and the social sciences. However, the OCOL has not done a formal evaluation of its various methods or prepared a handbook of audit procedures. Such a document could provide a basis for a training program for new officers and promote a desirable level of uniformity of audit approaches in the different divisions.

6.39 The OCOL should establish an official methodology for linguistic audits and quality standards for audit files and reports.

Management's comments: The OCOL has already put an appropriate plan into effect and will make every effort to develop new indicators of effectiveness.

6.40 In evaluating the effectiveness of this component of the program, the two branches use the number of audits and studies carried out. This is not a valid indicator. It would be more informative to know the scope of the audits, the type of shortcomings identified in the institutions audited and the extent to which the Commissioner's recommendations have been implemented. This type of information is not being compiled at present.

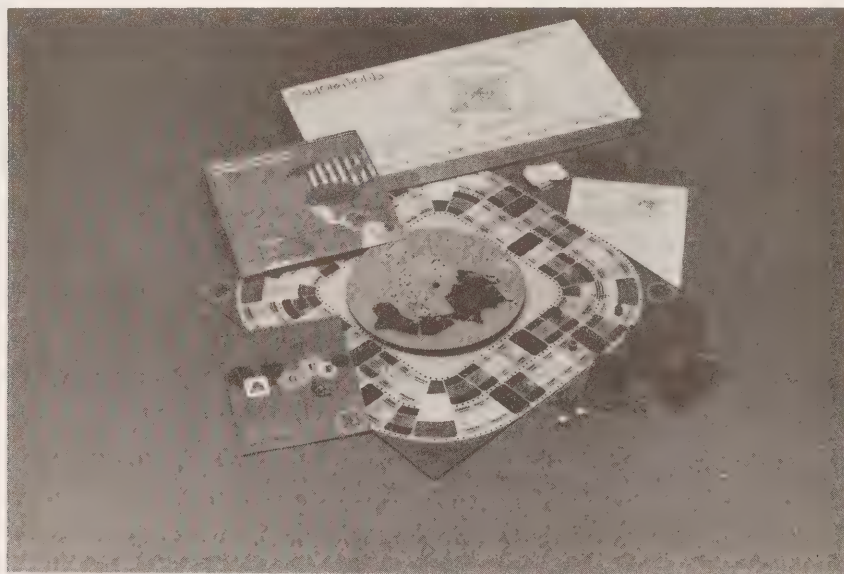
6.41 The OCOL should follow up its audits systematically, determine the effects of its recommendations and develop better effectiveness indicators.

Management's comments: The OCOL is developing a method of systematically analysing the action taken pursuant to its audit report recommendations.

Information Program

6.42 To fulfil its objectives of encouraging recognition of the status of the two official languages and promoting language reform, the OCOL has established an Information program, made up of two sections. The first covers distribution of information on the provisions and spirit of the Official Languages Act and the Commissioner's role in applying it. The second section aims to stimulate awareness of linguistic matters, especially in young people between 7 and 17 years of age.

6.43 Exhibit 6.4 illustrates the importance of the Supplementary Estimates to OCOL operations and to those of the Information Branch in particular. Nearly all these Supplementary Estimates have been used to produce and distribute language kits. Three kits have been issued since 1975: "Oh! Canada", "Oh! Canada 2", and "Explorations". The OCOL has little information on the distribution of the first but is controlling distribution of the other two adequately.



Since 1975, close to 3 million sets of the three linguistic kits ("Oh! Canada", "Oh! Canada 2", and "Explorations") have been distributed across Canada at a cost of \$7 million.

6.44 Although evaluations have shown generally that the kits are well received by young people, the Branch has not carried out a systematic study of the target population and the various options for reaching it. Funds for producing other information material are limited in relation to the budget used for the kits. From 1979-80 to 1982-83, an average of 69 per cent of the actual expenses of the Information program has been incurred for the kits.

6.45 The Information Branch should establish a planning framework for each of its information tools to justify its purpose, improve identification of its target groups and analyse all options for reaching these groups.

Management's comments: The OCOL accepts this recommendation. The Information Branch will endeavour, in planning its programs and activities (especially those involving large budgets), to systematically determine the most cost-effective options among those available. In addition, while developing materials, it will identify instruments that will enable it to check more systematically on whether those materials transmit the messages effectively and meet the needs of the target population satisfactorily.

6.46 The Information program is responsible for co-ordinating production of the Annual Report, to which all OCOL branches contribute. Appropriate methods are used to plan and control schedules and have made possible the submission of a report each year to Parliament on the Office's activities and on the linguistic situation in the country generally and in federal institutions in particular.

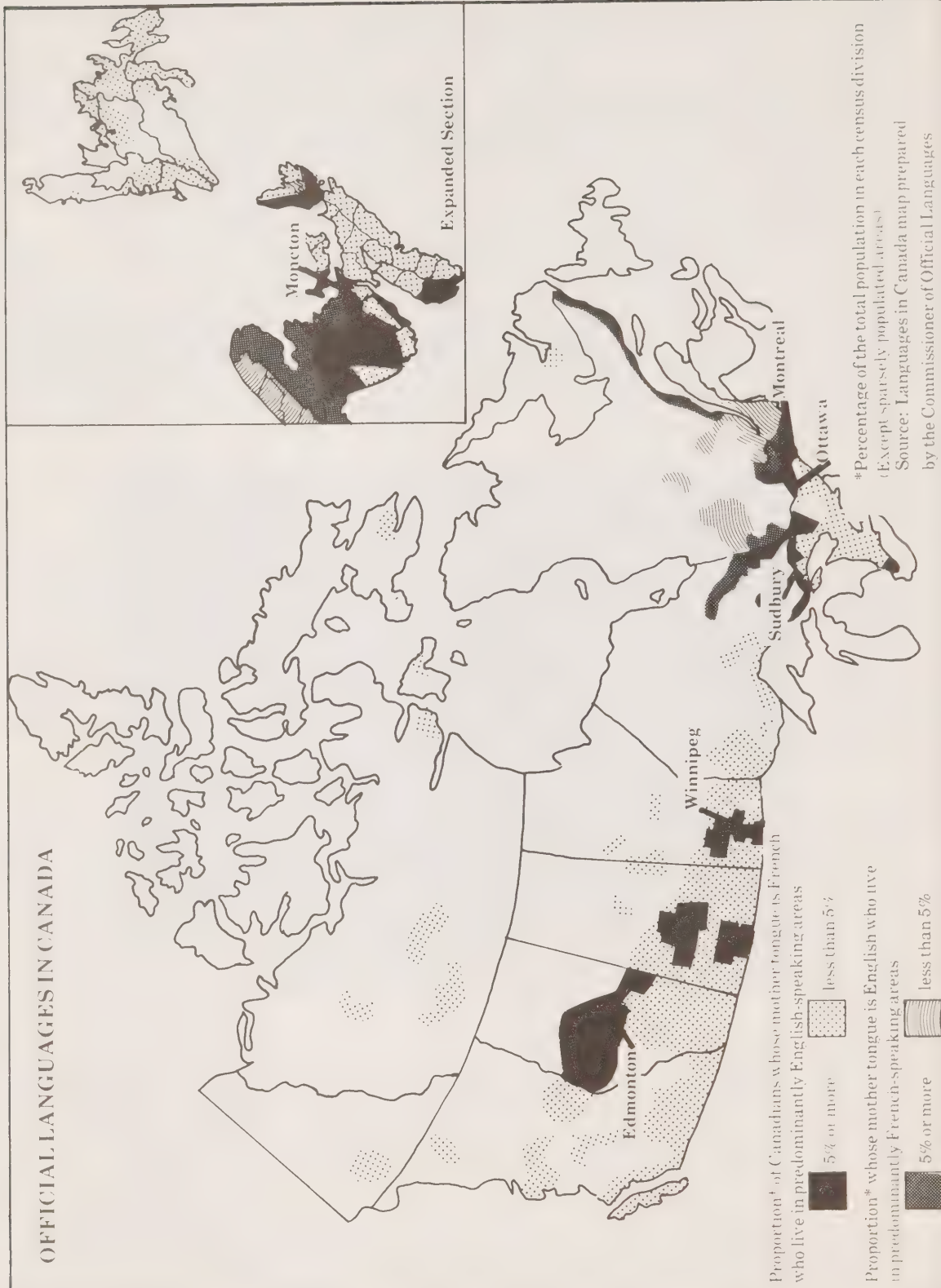
Policy Analysis and Liaison Program

6.47 Policy Analysis. This service is responsible for providing the Commissioner and OCOL managers with analysis and advice on bilingualism matters, preparing speeches and correspondence, and contributing to the writing of the Annual Report. It must respond quickly to requests from the Commissioner and be prepared to undertake analysis and research projects at short notice. Given this context and the small number of researchers involved in the activity, operational needs appear to be met, although there is little formal planning or control of activities. In April 1983, the service began developing an action plan which should improve the control and follow-up of different projects.

6.48 Liaison. Liaison is provided mainly through the regional offices, which are responsible for bringing the ombudsman and the liaison service in closer contact with communities in which both official languages are spoken, and for maintaining close links with federal authorities in these regions. Regional offices were opened in Moncton in 1977, Winnipeg in 1978 and Edmonton, Sudbury and Montreal in 1981. Analysis of the geographical distribution of the two official languages groups in Canada, illustrated in Exhibit 6.6, shows that the regional offices are appropriately located.

6.49 Staffing of the regional offices has been done without considering, in a systematic way, the operating needs and the minimum resources required. During 1982-83, the OCOL undertook to develop work plans based on operational objectives, but the results were not specific enough to enable it to determine how many employees were needed to implement these plans in each office.

6.50 The OCOL should ensure that the work plans developed for regional offices reflect clearly the resources required to achieve the program's objective and



that human resources are assigned to regional offices in accordance with approved plans.

Management's comments: The OCOL will attempt to increase human resources as required for the regional offices to operate smoothly, and will see that the work plans for these offices are as realistic as possible.

Program Evaluation

6.51 The OCOL has conducted program evaluations of three of its activities. Beginning in 1978, it carried out an evaluation of the language kit "Oh! Canada". In 1981, in response to a Treasury Board request, further program evaluations were done of the kits "Oh! Canada 2" and "Explorations". Also, an evaluation of the magazine *Languages and Society* is in progress.

6.52 The focus of the evaluations of the language kits was mainly on their qualities as teaching aids and the extent to which they were actually used by young people. However, the scope of these studies was limited in as much as they did not consider the rationale for, or alternatives to, these kits or attempt to relate achievement of the intermediate objectives that were assessed to the Commissioner's major information objectives of promoting a positive attitude toward Canada's linguistic duality and informing Canadians about the Act and the Commissioner's role.

6.53 The studies were used as the basis for revisions and improvements in the kits when they were reprinted in late 1981. Further, the studies supported a request to Treasury Board to continue producing these kits.

6.54 For an agency the size of OCOL, the evaluation of four of its activities represents an acceptable achievement. However, we noted that, thus far, the agency's evaluation efforts have been focused on its information activities to the exclusion of other major areas of effort.

6.55 The OCOL should develop a plan to evaluate its activities in a comprehensive way.

6.56 In evaluating its programs, the OCOL should consider the program rationale and alternatives to the program as possible issues to be addressed.

Management's comments: The OCOL has already reached an understanding with the Department of Supply and Services on a five-year internal audit plan covering the effectiveness of each of the components in its programs, and agrees that it would be appropriate to adopt a more rigorous approach to the evaluation of all its activities.

Information Systems and Efficiency

6.57 Financial information. The Department of Supply and Services provides the OCOL with financial reports. In combination with the information produced by the OCOL, either manually or by computer, these are adequate for budgetary control, even though management's information needs have not been clearly defined.

6.58 Information on human resource use. Managers do not have information about the amount of time employees spend on each activity. Employees are usually assigned to more than one project and sometimes to more than one activity at a time, and there are a number of people involved in each activity and project. Although efforts have been made to institute time reporting in the Information program and the Complaints and Audits program, this data has not been compiled yet to provide information on human resource utilization. The lack of this information makes it difficult for management to appraise the performance of employees and complicates analysis and justification of each program's human resource requirements and assignment of person-years according to priorities.

6.59 Efficiency. Although the measures described in operational plans, such as the number of complaints resolved, give an indication of various programs' production, there is little information on the quality of service. There are also no useful performance standards with which actual production can be compared. The lack of performance measures and information on human resource utilization hinders management from adequately evaluating the efficiency of its activities and ensuring that human resources are used to best advantage.

6.60 Needs for information on human resource utilization and performance measures should be clearly defined, and management should set up an information system to assist in the control and measurement of the performance of employees and of the efficiency of its activities.

Management's comments: The OCOL will take into account its human resource information requirements in view of the computerized system that it is currently implementing.

Information to Parliament

6.61 The Commissioner must report to Parliament on the way he has carried out his duties and used the resources provided for his programs. He does this through the special joint Committee on Official Languages, the Annual Report and the Estimates.

6.62 Parliamentary Committee. The special Joint Committee on Official Languages, made up of members of both Houses of Parliament, was created in 1980. It plays two important roles with respect to the Commissioner of Official Languages. First, it is an essential link between the Commissioner and Parliament. It allows Parliament to have periodic access to information on the OCOL's accomplishments and to emphasize to the

Commissioner the official languages issues that are of greatest concern. For example, a 1983 report on language of work in the Public Service of Canada was initiated by the Committee. Second, through its public hearings and its recommendations to Parliament, the Committee has become an important institution for promoting and supporting the objectives of the Official Languages Act.

6.63 Annual report. Under the Act, the Commissioner is required to submit an annual report concerning his work. In it, he outlines his programs and new initiatives and the progress made in the OCOL's major activities over the previous year. The report describes the state of language reform in federal institutions each year and notes how well these institutions have complied with the spirit and intent of the Official Languages Act. It also deals with language issues under federal and provincial jurisdiction.

6.64 Estimates. Treasury Board has requested that departments and agencies support their requests for funds in Part III of the Estimates. Although the OCOL Part III submission for the 1983-84 Estimates is only a preliminary document, we studied it because its purpose is to provide additional useful information to Parliament on OCOL programs, to enable Members to analyse expenditures more thoroughly.

6.65 The submission prepared by the OCOL describes the programs and their major components well and reflects the programs' relationship to the Commissioner's triple role – ombudsman, auditor and promoter of language reform. The document also gives an adequate indication of the effect external factors have on the programs and of the results expected from the OCOL's major activities.

6.66 Management has endeavoured to set out program objectives and efficiency indicators. However, it has no mechanism for monitoring the achievement of program objectives, and the efficiency indicators used do not take into account the level and quality of services provided. Consequently, it is difficult for the OCOL to justify the resources requested and to determine whether it is making optimum use of its resources.

6.67 The OCOL is considering ways to improve its Part III submission. Implementation of our recommendations in the areas of program evaluation, efficiency and human resource utilization would assist the entity in preparing this document.

DEPARTMENT OF COMMUNICATIONS

DEPARTMENT OF COMMUNICATIONS

Table of Contents

	Paragraph	Page
SYNOPSIS	7.1	215
Overview	7.15	218
Audit Scope	7.23	219
Observations and Recommendations		
Communications Program		
Policy Sector	7.26	221
Radio Frequency Spectrum Management	7.33	222
Government Telecommunications Agency	7.57	227
Space Sector.	7.62	227
Research Sector	7.63	229
Arts and Culture Program	7.76	231
Management Systems		
Electronic Data Processing	7.91	233
Program Evaluation	7.96	234
Internal Audit	7.102	235
Inventory Control	7.105	235
Exhibits		
7.1	Departmental Organization and Programs	219
7.2	Communications/Arts and Culture 1982-83	220
7.3	Radio Spectrum Management Cost Recovery	226

DEPARTMENT OF COMMUNICATIONS

SYNOPSIS

7.1 Follow-up of 1978 audit. In 1978, we examined management controls in various elements of the Radio Frequency Spectrum Management activity and the Government Telecommunications Agency. We also examined other management support activities, including the organization of the financial function, internal audit, contracting procedures, and financial and inventory control systems. We identified a number of weaknesses in these areas, some of which have since been corrected. The most significant areas where problems remain, or are just now being addressed, are cost recovery practices, internal audit and inventory control.

7.2 Policy Sector. In the policy analysis and development process, overall responsibility for an issue is assigned to a specific branch, and a general time frame is established for developing proposals. However, the Sector has not specified the essential steps to be followed or the basic level of documentation required in carrying out policy development projects, including matters such as development of work plans showing specific activities and deadlines, consultation and co-ordination with others, and progress reporting.

7.3 Radio Frequency Spectrum Management. In 1978, Cabinet directed that the Radio Frequency Spectrum Management activity recover its full costs. Despite a fee increase in 1979, the activity's costs were not entirely recovered. The 1981-82 deficit was \$23.4 million, due, in part, to revenues foregone as a result of exemptions under the Radio Act and costs not recovered from the CRTC. Another licence fee revision took place on 1 April 1982. The corresponding deficit for 1982-83 is now estimated at \$25.3 million. The Department has not identified the proportion of costs it is attempting to recover.

7.4 Space Sector. In 1981, we developed and published criteria for planning and control of research and development projects. The Space Sector met these criteria.

7.5 Research Sector. Our audit focused on the systems used for project planning and control. The Sector follows a tradition of relying heavily on meetings and discussions for planning and controlling its projects. Although planning documents are produced to meet central agency requirements, these generally do not contain sufficient information for project planning and control purposes. The Sector is developing a new information system which should provide the basis for improved planning and control.

7.6 Telidon began as a four-year program in April 1979 with a total funding of \$9 million. The Telidon program has now been extended to 1985, with a total funding of \$59.3 million. To date, the program has not been evaluated to determine whether it is achieving its objectives.

7.7 Arts and Culture program. In July 1980, the Arts and Culture program was transferred from the Department of the Secretary of State to the Department of Communications. The transfer was made in recognition of the increasingly close links between culture and communications. However, this has not been reflected in a revised definition of objectives for the program. Various documents – the Estimates, the Annual Report, the Department's submission to the Applebaum-Hébert Committee – describe program objectives differently but not more precisely than prior to the transfer. This lack of clear objectives makes it difficult to establish program priorities and identify what the program is intended to accomplish.

7.8 Postal subsidy. The largest single item in the Arts and Culture program budget is a subsidy paid to the Canada Post Corporation to cover its losses as a result of offering preferential rates for publication mailings. The 1981-82 Estimates provided for \$189 million, and the 1982-83 Estimates \$220 million, for this subsidy. Specific objectives have not been documented by program management for the subsidy.

7.9 The Department, Canada Post and the central agencies have now agreed that the Department is to be responsible for \$53 million of the subsidy, and the remainder will be provided direct from the Consolidated Revenue Fund rather than from the Department's budget.

7.10 Program evaluation. The Department established a Program Evaluation and Audit Group in 1978. However, the evaluation unit was not given any permanent staff and did not become active until it was made a separate Division with its own staff in early 1982. It is too soon to comment on its activities.

7.11 Despite the absence of evaluation information, the Department received approval to extend the Canadian Book Publishing Development Program for three years after 31 March 1982 at an annual cost of \$8.9 million. The program was established in 1980 for a two-year period. Cabinet approved the extension despite a previous directive that the program be evaluated after two years. In approving this extension, Cabinet directed that the program be evaluated in 1984.

7.12 The Special Program of Cultural Initiatives was extended for two years at a total cost of \$34.1 million. The program was originally approved in October 1980 and was to terminate on 31 March 1983. The Department was to have evaluated the program by November 1982. The evaluation is now planned for March 1984.

7.13 Internal audit. In 1978, we commented on deficiencies in the internal audit function and made a number of recommendations for improvement. In February 1982, the Office of the Comptroller General noted that there were still a number of serious problems. We agreed with this opinion. Later in 1982, the group was reorganized and a new director appointed. Action is being taken to address the concerns expressed by our Office and the Comptroller General.

7.14 Inventory control. The Department has an inventory with an approximate value of \$80 million. Inventory was not documented in a consistent way across the Department. Some responsibility centres recorded leased materiel; others did not. Some entered standard items using standard forms, others used data found in contracts, still others took the information from invoices. At the Communications Research Centre, office equipment and furniture were not recorded in the national inventory system.

Overview

7.15 The Department of Communications was established in 1969 by the Department of Communications Act. It currently administers two programs; it has administered the Communications program since its creation and the Arts and Culture program since 1980.

7.16 The objective of the Communications program, as indicated in the 1982-83 Estimates, is "to foster the orderly development and operation of communications for Canada in the domestic and international spheres". The program also includes administration of the Government Telecommunications Agency Revolving Fund, whose objective is "to plan, establish, and manage telecommunication facilities and services that will satisfy the requested needs of federal departments and agencies on an economic basis".

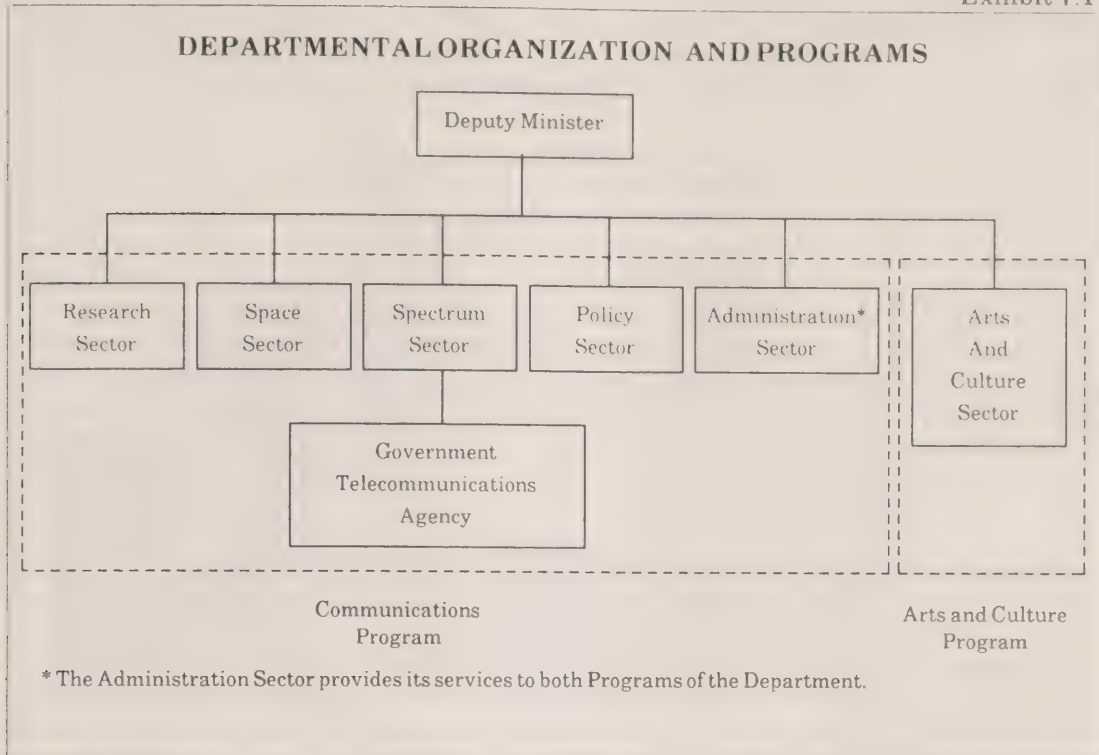
7.17 In July 1980, the Arts and Culture portfolio, which had been under the jurisdiction of the Secretary of State, became the responsibility of the Minister of Communications. At the same time, the Arts and Culture program was transferred from the Department of the Secretary of State to the Department of Communications. The objective of the Arts and Culture program is "to formulate and develop policies and programs for the achievement of national arts and cultural objectives and to promote effective inter-agency, inter-departmental and inter-government co-operation in the achievement of these objectives".

7.18 This change added a new dimension, that of culture, to the responsibilities the Department already had in the fields of telecommunications policy, communications research, information and space technology, regulation of the radio frequency spectrum and government telecommunications. The Department operates in a field of rapid and constant technological development. The laws regulating its activities have not been revised since the Department was created in 1969.

7.19 The Canada Council, Canadian Broadcasting Corporation, Canadian Film Development Corporation, Canadian Radio-television and Telecommunications Commission (CRTC), National Arts Centre Corporation, National Film Board, National Library, Public Archives, National Museums of Canada and Social Sciences and Humanities Research Council of Canada are all included in the Communications portfolio. However, they are not part of the Department and are not covered by this comprehensive audit. The Office has undertaken separate comprehensive audits of the National Library and Public Archives. These audits are reported in Chapters 14 and 15 respectively.

7.20 As indicated in Exhibit 7.1, the Department is divided into six major sectors: Policy, Research, Space, Radio Frequency Spectrum Management and Government Telecommunications, Arts and Culture, and Administration.

Exhibit 7.1



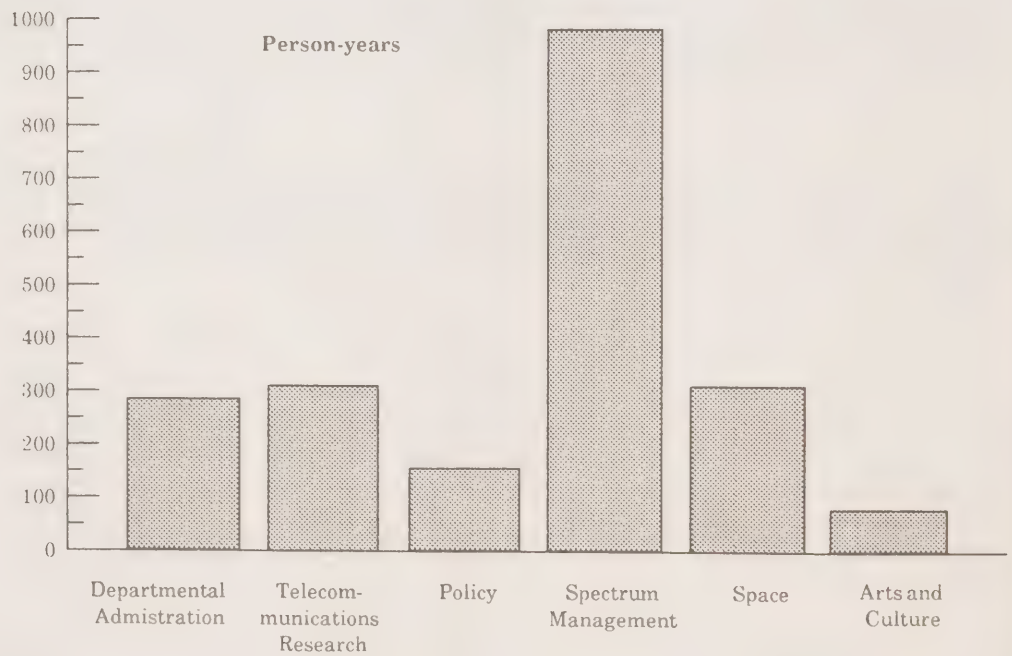
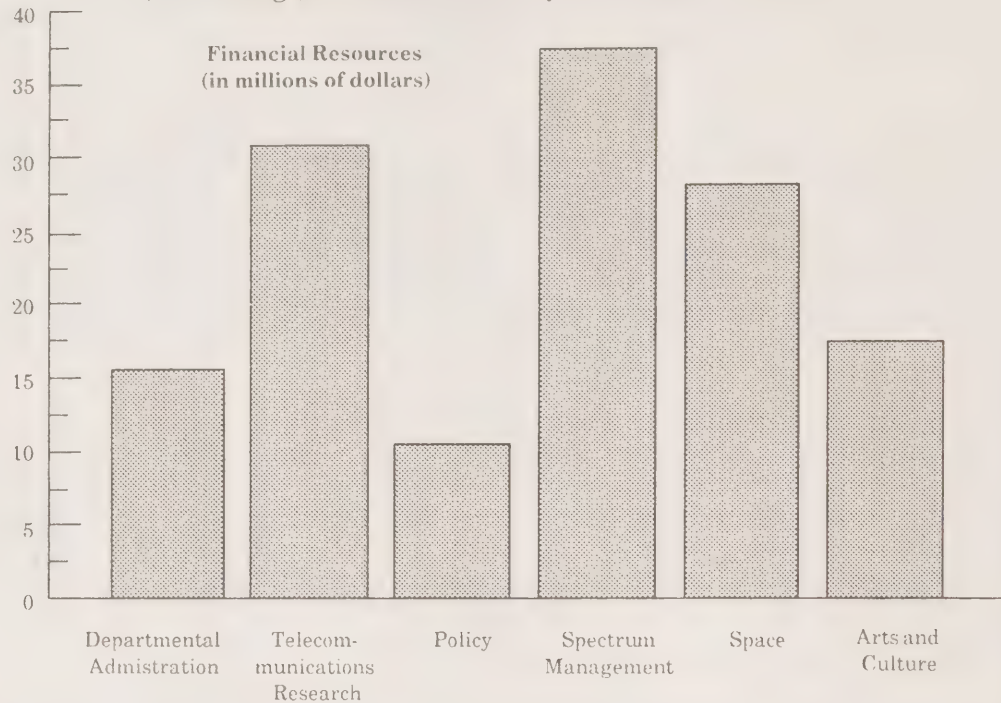
7.21 For 1982-83, the Department's appropriations totalled some \$365 million, including a \$220 million subsidy for the Canada Post Corporation from the Arts and Culture program. It should be noted that in 1983-84, the share of the subsidy to be covered by the program will amount to \$53 million.

7.22 In 1982-83, the Department had approximately 2,300 authorized person-years: 1,600 at Headquarters in Ottawa and 700 in the 5 regions. Exhibit 7.2 shows the human and financial resources allocated to the various sectors of the Communications and Arts and Culture programs.

Audit Scope

7.23 During our audit, we examined all the organizational sectors of the Communications and Arts and Culture programs. The purpose of our audit was to determine whether the Department was managing its programs in an economic and efficient manner and whether it had satisfactory procedures for measuring and reporting on program effectiveness.

7.24 We also examined management systems common to all sectors of the Department: financial management and control; electronic data processing; internal audit; and inventory control.

COMMUNICATIONS / ARTS AND CULTURE 1982-83
(Excluding \$220 million subsidy to Canada Post)

7.25 As well, we included in this audit a follow-up of the observations and recommendations made in our 1978 comprehensive audit of the Department and our 1979 study of government telecommunications.

Observations and Recommendations

Communications Program

Policy Sector

7.26 The mandate of the Department, as established in the Department of Communications Act, the Estimates and in strategic and operational plans, gives the Department a very broad field of activity. As a result, the Policy Sector deals with matters for which other departments and the CRTC have complementary but separate responsibilities.

7.27 The Broadcasting and Social Policy Branch of the Policy Sector, as indicated to the Applebaum-Hébert Committee in January 1982, has, among other things, a responsibility for "the development of policies having socio-cultural and economic impacts in the area of broadcasting and the development of appropriate legislation in respect of these policies." Other branches in the Sector also spend a considerable amount of time dealing with various aspects of broadcasting in support of the Broadcasting and Social Policy Branch.

7.28 The Department's role is described in the Radio Act, the Broadcasting Act, the Department of Communications Act and other legislation. According to the Broadcasting Act, the CRTC "shall regulate and supervise all aspects of the Canadian broadcasting system ...". There are many grey areas relating to jurisdiction between the Department and the CRTC since the Department advises the Governor in Council on appeals to CRTC decisions. It also advises the Government on the broad policy framework within which the CRTC implements specific regulatory policy. The 1979-80 Annual Report of the CRTC states that its Planning Division is responsible for "undertaking policy, market, and regulatory studies of a short, medium, and long term nature of both the broadcasting and cable industries" and "developing policies and plans for the broadcasting and cable industries to meet the objectives of the Broadcasting Act by considering present and future market, economic, and technological constraints and conditions." We are aware, however, that the Department's role in appeals from decisions of the CRTC results in some inevitable overlap in the activities and research of the two bodies.

7.29 The Department should establish a procedure for sharing information as appropriate with the CRTC and ensuring that areas of possible overlap respecting studies and activities are subject to continuing scrutiny.

Department's response: Senior officials of the Department regularly meet with senior officials of the CRTC on an informal basis. However, the Department

undertakes to discuss with the CRTC the method of implementing this recommendation.

7.30 Management of policy development. Four studies commissioned by the Department recommended a reorganization or general reorientation of activities in the Policy Sector. They emphasized the lack of inter-sectoral co-ordination and, within the Sector, the lack of priorities and of control over the use of resources. Management had received the results of the four studies before we began our audit.

7.31 Although the staff of the Sector agree on the essential steps to be followed in carrying out policy development projects, no official process has been established to provide for consistency and to ensure that all steps are included. The steps to be carried out in developing policy proposals have not been documented. This is required in the Department for planning time, allocating resources, monitoring progress, and improving control and the quality of projects.

7.32 The Policy Sector should establish and document the essential steps to be followed in the policy development process.

Department's response: The Policy Sector agrees and will continue to build on measures already under way for an effective policy process.

Radio Frequency Spectrum Management

7.33 The radio frequency spectrum constitutes a limited resource. A number of categories of communications use various frequency bands according to their requirements. Management of the spectrum can be defined as the implementation of procedures which determine the use of frequencies, while controlling the congestion, interference and communications breakdowns which would occur without such procedures.

7.34 This Sector accounts for approximately 25 per cent of the financial resources and 49 per cent of the human resources of the Communications program: 30 per cent at Headquarters in Ottawa, and 70 per cent in the 5 regional offices, which include 44 district offices.

7.35 The Sector has three objectives: to ensure a suitable distribution of radio frequency bands among the various services (broadcasters, amateur radio operators, ships, satellites and so on); to ensure users equitable access to frequencies as quickly as possible; and to establish and maintain the quality of the spectrum. To fulfil these objectives, the Sector has been divided into three groups: the spectrum planning and engineering group, which allocates frequency bands; the authorization group, which assigns frequencies to users by issuing licences and operator's certificates; and the spectrum control group, which is responsible for supervising application of the Radio Act and regulations to maintain the quality of the spectrum.

7.36 The Spectrum Management System (SMS) project. In 1975, the Sector obtained authority from Treasury Board to carry out a project to upgrade the automated procedures and equipment used to assign radio frequencies and issue licences. This project was to last five years and cost approximately \$10 million.

7.37 In our 1978 audit, the focus of our comments was that management and control of the project should include regular review by a steering committee. The Department accepted this recommendation and set up a committee attached specifically to the SMS project.

7.38 In the 1980 submission to Treasury Board to obtain approval for national implementation of the system, the Department forecast savings of \$3.8 million in the seven years following introduction of the system in 1982-83, including a saving of 600 person-years as a result of reductions in staff growth.

7.39 During our audit, which took place in the system's first year of operation, a few fine-tuning problems arose in areas such as data conversion, service bureau performance, the personnel training program and operating delays in some functions of the system.

7.40 We were informed that an evaluation of the system would be conducted during the coming months.

7.41 In carrying out the planned evaluation of the Spectrum Management System after its national implementation, the Department should determine, among other things, whether projected savings have been realized.

Department's response: The Department intends to determine, in the course of the planned evaluation of the Spectrum Management System, whether projected savings are being realized.

7.42 Management information system. In our 1978 Report, we recommended that the Department continue to develop and improve its regional reporting system with regard to measures of operational effectiveness. The Department accepted our recommendation by introducing the Spectrum Telecommunications Management Information System. Improvements in the system led to the development of a new information system for regional operations, which was implemented on 1 April 1982. The Department is now developing a similar system to be introduced at Headquarters.

7.43 Recovery of spectrum management costs. The Radio Act gives the Governor in Council the power to "prescribe the tariff of fees to be paid for licences and for examination of certificates of proficiency". The Act also specifies that users of the frequency spectrum must obtain a licence for operating a radio apparatus or station. Under the Act,

certain users, such as municipalities, governments and some Crown corporations, benefit from complete or partial exemption from these fees.

7.44 In our 1978 audit, we recommended that the Department update its fee structure periodically, with a view to recovering the full costs of spectrum management. The Department indicated that this had been done; an updated fee schedule would be implemented in 1979-80.

7.45 A revision of the fee schedule was implemented on 1 April 1979. In 1978, when the Department asked for approval of the new fees which were to enable it to recover the cost of administering the spectrum, it indicated that revenues for 1979-80 were forecast at \$30 million. These revenues were expected to be sufficient to defray spectrum administration costs. Cabinet approved the new fees and asked the Department to submit recommendations at least every two years for revision of the radio licence fee schedule. These recommendations were to be formulated in a way that enabled the Department to fully recover the cost of managing the spectrum.

7.46 The Department did not fully recover the costs of managing the spectrum in 1979-80, 1980-81 or 1981-82, even taking into account revenues not received due to exemptions under the Radio Act and costs not recovered from the CRTC. The 1981-82 deficit was \$23.4 million, excluding these foregone revenues.

7.47 Further, the Department did not submit recommendations in 1981 for revision of the licence fee schedule. We were unable to find in the documentation supporting the 1 April 1982 fee increase any justification of the non-recovery of full spectrum management costs between April 1979 and March 1982.

7.48 Cabinet approved a subsequent revision of the fee schedule effective 1 April 1982. At the same time as it was obtaining this approval, the Department projected a \$13.6 million deficit; revenues were expected to total \$31.2 million, including an allowance of \$13 million for foregone revenues, and expenditures \$44.8 million.

7.49 Cabinet had, moreover, asked the Department to proceed with public consultation on the fee revision process and to submit a new fee schedule for implementation on 1 April 1983. The Department, which was still in the process of consultation, did not submit the new schedule to Cabinet.

7.50 Also, there was no discussion or explanation of what the estimates of revenues of \$30 million for 1979-80 and \$31.2 million for 1982-83 were composed of. Revenues that could not be recovered because of exemptions provided for in the Radio Act and costs not recovered from the CRTC were included as if they had been charged to these groups.

7.51 The Department estimated that the exemptions under the Radio Act, such as those granted to municipalities, governments and certain Crown corporations, totalled some \$5 million in 1982-83. An internal departmental study estimates the costs of services for broadcasting, such as development of technical standards and certification, to be in the order of \$8 million in 1982-83. These are not recovered from the CRTC.

7.52 The revenue totals projected for 1979-80 and 1982-83 in the documentation supporting the applications for revision of the fee schedule differed considerably from the actual revenues for 1979-80 and the projected revenues for 1982-83 indicated in the Estimates. Revenues, including an allowance for exemptions and costs not recovered from the CRTC, were forecast at \$30 million for 1979-80. Actual revenue received, which excluded the allowance for foregone revenue, totalled \$11.1 million. Revenues for 1982-83 were projected at \$31.2 million, including the \$13 million attributed by the Department to foregone revenue. However, actual revenues were estimated at \$12.4 million in the 1982-83 Estimates. This is illustrated in Exhibit 7.3.

7.53 As a result of the Treasury Board directive limiting increases to six and five per cent, the Department cannot now make any increases without Treasury Board approval.

7.54 Following the public consultation now under way, the Department should develop and justify a cost-recovery plan and policy and have them approved. The policy should indicate whether the Department should recover costs fully or in part and, if in part, specify the proportion of costs which should be recovered.

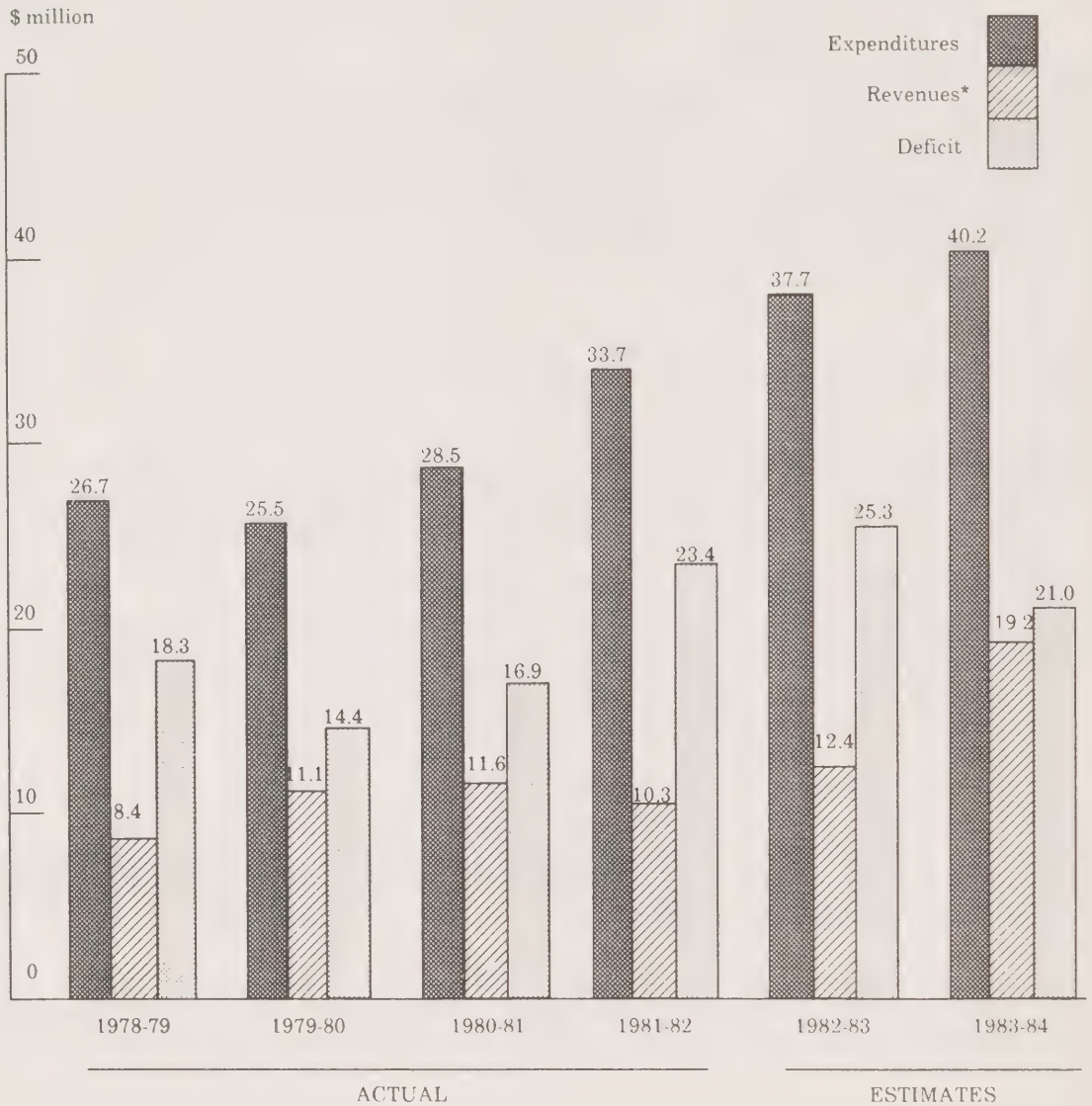
Department's response: The Department is preparing a discussion paper on cost recovery for spectrum management. This paper will provide the basis of consultation with interested parties and, following such consultation, the Department will be making recommendations on various matters relating to cost recovery.

7.55 The Department should, as requested by Cabinet, prepare recommendations every two years for revision of the licence fee schedule. If it is unable to do so, it should get Cabinet's approval for a postponement.

Department's response: The last revision of the licence fee schedule was effective April 1, 1982. The Department intends to make a recommendation concerning further revisions of the schedule in time for any changes to be effective April 1, 1984.

7.56 In its recommendations for revision of the licence fee schedule, the Department should indicate the proportion of non-recoverable revenue resulting from exemptions under the Radio Act and costs not recovered from the CRTC.

RADIO SPECTRUM MANAGEMENT COST RECOVERY



Ref: Estimates

* Does not include the revenues that could be collected from users exempt under the Radio Act or from the CRTC if the Department billed the Commission for the costs of services rendered

Department's response: The Department agrees to identify non-recoverable revenues resulting from exemptions when it recommends revision of the licence fee schedule.

Government Telecommunications Agency

7.57 The Government Telecommunications Agency (GTA) has 205 authorized person-years, and its operations, in 1982-83, cost a total of \$113 million, an amount fully recovered from federal departments and agencies. Our audit focused on following up the observations and recommendations made in our 1978 and 1979 Reports.

7.58 **Management of the shared inter-city voice network.** With regard to network capacity, GTA has established service objectives which make it possible to determine the number of inter-city circuits required between the various cities in the network to meet client demand. In our 1978 audit, we recommended that the Agency re-examine its service objectives for the inter-city network and submit them to Treasury Board for approval. Although GTA has conducted some studies on the subject, these service objectives had not been rationalized or approved by Treasury Board at the time of our audit.

7.59 The introduction of digital switches, which GTA will soon be using in the National Capital Region, the heart of the network, will provide useful information for the development of new service objectives. These can then take into account both the possibilities offered by the new switches and the requirements of client departments.

7.60 **The Government Telecommunications Agency should develop new service objectives and submit them to Treasury Board for approval before implementing new service features offered by the digital switches.**

Department's response: The introduction of digital technology in Government of Canada telephone consolidations will make available certain state-of-the-art features to all users as an inherent part of the system. In addition, a multitude of optional modern features are available at additional cost. Directives and guidelines for various classes of users, including the approval and provision of optional features, are being developed for approval by Treasury Board.

7.61 Aside from our comments on service objectives, we believe that GTA has taken satisfactory action to follow up on the recommendations we made in 1978 and 1979.

Space Sector

7.62 Our audit of the Space Sector focused on systems for project planning and control. In the projects we reviewed, we found that outputs, timetables and responsibilities were identified in approval documents and related work plans. Performance on projects was



Three of Telesat Canada's Anik C Satellites will have been launched by the end of 1985. The first was launched on the inaugural commercial mission of the U.S. Space Shuttle. (Artist's conception courtesy of Telesat Canada).

monitored monthly against planned milestones. We concluded that the Sector met the criteria we use to assess project planning and control.

Research Sector

7.63 The Department of Communications carries out research in house, mainly at its Communications Research Centre near Ottawa, and through contracts with industry and universities. In addition to meeting its own requirements, the Department undertakes research in support of other government departments. In 1982-83, the research activity involved 313 person-years and \$30.7 million.

7.64 **Project planning.** We examined the systems used to plan and control projects carried out in the Research Sector, taking the Department's Operational Plans for the 1981-82 budget year as a basis for review. The criteria we used to assess planning and control were those published as an appendix to the review of Research and Development in the 1981 Report of the Auditor General.

7.65 We reviewed project descriptions to determine whether objectives and outputs were clear and measurable; project plans related inputs to outputs; and timetables, dates and responsibilities were identified. We observed that project proposals were not sufficiently specific, in terms of expected outputs, tasks, and assignment of responsibilities, for project management and control purposes. There were no guidelines for preparing proposals or work plans. Project proposals or work plans were not routinely prepared at the sub-project level except for work related to military research.

7.66 Some of these shortcomings will likely be corrected when the Research Sector implements the new management information system currently under development. However, we believe that certain additional steps are needed to strengthen project planning.

7.67 **The Research Sector should:**

- **develop and promulgate guidelines for project proposals; and**
- **require that project proposals be accompanied by appropriate back-up documentation in the form of work plans related to milestones and responsibilities.**

Department's response: The Sector is currently in the process of implementing a comprehensive management information system and, as a subset within this system, the issues relative to standards and procedures, including project management, are being addressed.

The information provided by the management information system will go well beyond that recommended by the Auditor General in that it will also relate proposals to priorities and long-term and strategic plans.

7.68 Project control. Our examination of control processes revealed that monthly reports on expenditures and commitments were prepared for review by Sector management. However, progress on projects, in terms of performance and results achieved, was not always reviewed systematically against plans, because project descriptions did not provide enough detail related to key dates or activities.

7.69 Each branch of the Research Sector had its own system of monthly, quarterly or ad hoc reporting. Reports generally gave a brief summary of activities undertaken since the last report and were used primarily to inform managers of responsibility centres about activities undertaken in their areas.

7.70 The Research Sector should develop standards for periodic progress reports.

Department's response: Such standards are being incorporated in the management information system.

7.71 The Telidon program. Telidon is a major program of the Research Sector of the Department of Communications. "Telidon" is the name given to the Canadian Videotex and Teletext systems. Teletext is a one-way, or receive-only, system. Videotex systems have a two-way communications link connecting the user and the information source. This allows the user to select the specific information required and enter information or commands. With the addition of a decoder box, Videotex allows a television set to be connected, via telephone lines, with computer databases, thus allowing access to information and data ranging from current weather forecasts to stock market quotations.

7.72 Telidon began as a four-year program in April 1979, with total funding of \$9 million. In September 1979, a Telidon program plan was prepared. It was used for approximately two months before rapidly changing events required that it be abandoned. In March 1981, a study was completed on a project planning and control system for Telidon, but the report describing the proposed system was never used. The 1981-82 Operational Plan specifies that, by 1 April 1982, monthly reports of activities for management decision-making should be produced. There were no reports at the time of our audit, nor a system for producing them.

7.73 To cope with the rapidly changing reality of the Telidon program, an informal planning and control process has evolved based on frequent meetings and small development teams. Priorities are set, plans and evaluations made and short-term direction given at weekly meetings. External advice is provided by the Canadian Videotex Co-ordinating Committee and its sub-committees.

7.74 The Telidon program has recently received approval for further funding amounting to \$17 million. The total Department of Communications budget for Telidon by the end of 1985 will have reached \$59.3 million. Although the program has not been

evaluated to determine whether it is meeting its objectives, the Department has indicated that a program evaluation of Telidon is to be completed by the end of March 1984.

7.75 The Department should ensure that Telidon is evaluated as planned.

Department's response: The Department responds that it is planning to complete the Telidon evaluation as scheduled.

Arts and Culture Program

7.76 **Role and objectives.** Before 1980, the Arts and Culture program was the vehicle by which the Department of the Secretary of State carried out its duties, powers and functions in the arts and culture fields under the Department of the Secretary of State Act. Neither this Act nor the Department of Communications Act was amended to clarify the mandate of the program following its transfer.

7.77 The Estimates indicate that the objective of the program is "to formulate and develop policies and programs for the achievement of national arts and cultural objectives and to promote effective inter-agency, interdepartmental and inter-government co-operation in the achievement of these objectives."

7.78 The 1980-81 Annual Report indicates that the Department is responsible for the formulation of cultural policy for the federal government and for ensuring "that communications policy is conducted with the highest concern for the cultural content and the cultural implications of communications technology." The Department's aim is to ensure that its activities "contribute positively to Canadian cultural expression and the fabric of our society."

7.79 The Department's submission to the Applebaum-Hébert Commission states that it is the responsibility of the Minister to ensure that "communications policy reflects the highest concern for Canadian cultural content and, simultaneously, that those involved in the arts and in culture are kept abreast of technological progress in communications." The objectives listed for the activities of the program are to assist the Minister in developing policy and legislation and in co-ordinating the activities of federal cultural agencies and interdepartmental, federal-provincial and international activities and projects; to implement federal programs; to initiate and monitor cultural research projects; and to inform the public about departmental activities.

7.80 Because these documents do not describe the Department's responsibilities more precisely, it is difficult to identify specific and measurable objectives, to pinpoint the main role or roles of the programs and to determine priorities among activities. In addition, performance indicators have not been established by program management.

7.81 A 1979 Initiative for Improved Management Practices and Controls (IMPAC) survey, conducted in the Department of the Secretary of State by the Office of the Comptroller General, revealed these same difficulties and established a link between the difficulty of developing objectives and setting priorities and the vagueness of the program's mandate.

7.82 **The Department should clearly define its role and objectives in the arts and culture field.**

Department's response: In the sectoral response to the Applebaum-Hébert Report, the Department's role and objectives are gradually being defined. This process was further enhanced by the cultural policy framework approved by Cabinet in the summer of 1983.

7.83 **Postal subsidy.** In September 1978, the Department of the Secretary of State and the Post Office Department reached an agreement on a subsidy to cover losses incurred as a result of preferential rates for publication mailings. The Secretary of State Department was to develop a policy on eligibility, identify beneficiaries and establish a fee structure. Responsibility for negotiating agreements was assigned to the Arts and Culture program and thus became the responsibility of the Department of Communications in 1980. The Post Office Department's part was to administer the activity and provide the Arts and Culture program with data on volume and client types to enable it to develop or amend its policies. Substantial amounts have been authorized under this agreement: \$189 million in 1981-82 and \$220 million in 1982-83.

7.84 We were unable to find any documentation developed by program management outlining the objectives of this preferential rate.

7.85 In December 1982, Cabinet decided that only \$53 million of the subsidy would be charged to the Arts and Culture program in 1983-84. This amount is an estimate to cover the additional revenue the Canada Post Corporation could earn if it were allowed to charge commercial rates. A separate subsidy of \$170 million will also be paid in 1983-84 to Canada Post to defray associated overhead and operating costs. This amount will be paid from the Consolidated Revenue Fund rather than from the Arts and Culture program's budget.

7.86 **The Department should establish and document its objectives in subsidizing preferential rates for publication mailings.**

Department's response: We are expecting a major research report on periodicals this year from a major consulting firm. Perhaps the most significant aspect of this research is the review of the postal rate program. New policy proposals for both books and periodicals will be proposed in the spring of 1984 and will address the question of postal rates.

7.87 The Film Certification Office. The mandate of the Film Certification Office is to certify eligibility of films for capital cost allowance under the Income Tax Act on the basis of production criteria relating to Canadian content. This program was adopted to encourage the private sector to invest in Canadian film production.

7.88 Despite the fact that the Office asks producers to submit audited financial statements with their applications, it has on several occasions suspected producers of inflating their statements of costs. The Office has not revoked certification in such cases, because production costs are not a criterion for certification of a film as Canadian and because an investigation would have been required to prove that there was a discrepancy between the real and declared costs.

7.89 When the Office believes or considers costs to be too high, it informs Revenue Canada, because ensuring conformity between declared and real costs comes under its jurisdiction and not that of the Department of Communications. Recently, the Office discovered such a case and alerted Revenue Canada, but Revenue Canada decided not to follow up on the matter. The RCMP was called in by the Office, and charges were laid. This case demonstrates that controls over the program need to be tightened.

7.90 The Department of Communications should initiate negotiations with Revenue Canada to reach agreement on an official procedure for dealing with cases of possible fraud.

Department's response: The Department intends to approach Revenue Canada with such a proposal but it is essentially within Revenue Canada's mandate to determine whether such a procedure is necessary.

Management Systems

Electronic Data Processing (EDP)

7.91 Electronic data processing accounts for about six per cent of the total departmental budget and supports almost all major departmental programs. The Computer and Information Systems Branch controls some 25 per cent of the EDP budget. The remainder is distributed among other sectors of the Department.

7.92 We reviewed the Department's EDP Policy and Procedures Manual, published in November 1981. We found it was generally satisfactory, although there were no clear policy and procedures for long-range EDP planning. The absence of a long-range EDP plan was also highlighted in a departmental EDP audit report in May 1980.

7.93 The EDP Policy and Procedures Manual should be modified to include long-range EDP planning for the whole of the Department.

Department's response: Discussions are being held to ascertain the optimum approach for the modification of the EDP Policy and Procedures Manual which will include the methodology of and responsibility for long-range EDP planning for the Department.

7.94 The internal audit of the departmental EDP function in May 1980 noted various deficiencies which we also observed during our audit. The Department has implemented some of the recommendations made in the 1980 audit report. However, there had been no formal follow-up of the report in the past year by the Information System Steering Committee to identify deficiencies that still remain to be corrected.

7.95 The Information System Steering Committee should follow up on internal EDP audit reports and monitor progress in implementing recommendations.

Department's response: The Director of Computer Services will ensure the Information System Steering Committee follows up on the internal audit reports and the implementation of the recommendations.

Program Evaluation

7.96 In November 1978, the Department adopted a policy establishing a Program Evaluation and Audit Group. This Group consisted of an internal audit unit and a program evaluation unit.

7.97 From 1978 to 1981, the program evaluation unit had no permanent staff, and it was not until early 1982, when a separate Program Evaluation Division was established and a director hired, that the Department made a serious effort in this area. It is too early to comment on program evaluation in the Department since this Division, which is responsible for evaluation studies, is still in the preliminary stages of its work.

7.98 **Evaluation of the Canadian Book Publishing Development Program.** This program was established in 1980 for a two-year period. In approving it, Cabinet asked that the Department evaluate the program's efficiency and effectiveness before extending it.

7.99 No evaluation was carried out; yet, in January 1982, the Department asked Cabinet to extend the program to 1984-85, indicating that it had not been possible to conduct an evaluation due to a lack of data. Cabinet agreed to extend the program, with the express condition that an evaluation be made in 1984. The Department has indicated that an evaluation of this program will be completed by the end of December 1983.

7.100 **Evaluation of the Special Program of Cultural Initiatives.** In October 1980, Cabinet approved implementation of this program and operation to 1982-83 at a total

cost of \$39.6 million. It requested, however, that the program be evaluated in accordance with Treasury Board requirements. The Department was to conduct the evaluation and submit a report before November 1982. This was not done. The program was extended to the end of 1984-85, at a total cost of \$34.1 million. An evaluation is now planned for March 1984.

7.101 The Department should ensure that the evaluations of the Canadian Book Publishing Development Program and the Special Program of Cultural Initiatives are completed as planned.

Department's response: The Department responds that it is proceeding with these evaluations as planned.

Internal Audit

7.102 In 1978, we made a number of recommendations on the internal audit function that dealt with the audit committee, the mandate of the Internal Audit unit and its organization, planning, audit work and follow-up procedures.

7.103 The unit was also reviewed in 1981 by the Office of the Comptroller General (OCG), which issued a report in February 1982. In this report, the OCG noted serious deficiencies and indicated that the Internal Audit unit had not taken action on the recommendations we made in 1978.

7.104 Following the OCG's evaluation, we reviewed their files and agreed with their observations. We followed up their recommendations and reported to the Department. Although progress has been made since that time, it was too early at the time of our audit to determine to what extent the problems noted had been solved.

Inventory Control

7.105 The Department has an inventory with an approximate value of \$80 million, which includes items ranging from office equipment to the technical and electronic equipment used at the Communications Research Centre (CRC) and in the Spectrum Management activity. During our audit, we discovered that inventory was not being documented uniformly at Headquarters, the CRC and in the regions. Some responsibility centres recorded leased materiel; others did not. Some entered items using standard forms, others used data found in contracts, and still others took the information from invoices. At the CRC, where approximately 60 per cent of all inventory is found, office furniture and equipment were not recorded in the national inventory system. The system did not provide a control over items on loan outside the Department. These observations on the CRC inventory are similar to those made in our 1978 Report.

7.106 Also, taking physical inventory has become increasingly difficult. Lists produced by the system are several weeks old. Identical items are classified in different categories and under different numerical codes in the various responsibility centres. Some items do not have identification stickers. As a result, time is wasted and there is a risk of items being lost. We also noted that a microprocessor, valued at \$40,000, had been deleted from the Communications Research Centre's lists without authorization or explanation. The Department told us that it had disposed of this equipment. However, we were unable to find documentation supporting or authorizing its disposal. About four months later, the Department indicated that the deletion involved a duplicate record only and that the equipment was still in use but had been given a different identification number and description. We confirmed that this was the case. We concluded that the Department's inventory system was not meeting its objectives of providing a national listing of departmental goods and materiel and controlling this inventory in an efficient and economic manner.

7.107 The Materiel Management Division should develop an inventory control system that meets departmental needs. It should ensure that all responsibility centres in the Department record their inventory in a uniform manner and that the system is updated regularly.

Department's response: The Materiel Management Division will initiate modifications to the Departmental Inventory Control System in order for it to meet departmental needs. The Division will also monitor the recording of the assets at the Communications Research Centre to ensure that it is done in a manner consistent with the rest of the Department.

EMPLOYMENT AND IMMIGRATION CANADA

EMPLOYMENT AND IMMIGRATION CANADA

Table of Contents

	Paragraph	Page
SYNOPSIS	8.1	241
Overview	8.13	243
Audit Scope	8.21	245
Observations and Recommendations		
Organization	8.27	248
Strategic and Operational Planning	8.37	250
Programs		
Unemployment Insurance	8.43	251
Labour Market Development	8.75	260
Employment Services	8.100	263
Management Controls and Support Functions		
Personnel	8.115	267
Systems and Procedures Group	8.129	269
Employment and Immigration Information System	8.154	274
Performance Measurement	8.162	275
Program Evaluation	8.174	277
Internal Audit	8.182	278
Information for Parliament	8.191	280
Exhibits		
8.1 Summary Organization Chart		244
8.2 Funds Administered and Disbursed		
by Employment and Immigration Canada		246
8.3 Allocation of Person-years		247
8.4 Revenues, Expenditures and Surplus/Deficit		
Unemployment Insurance Account 1978 to 1982		253
8.5 Unemployment Insurance Claims Received and		
Approved 1978 to 1982		254

EMPLOYMENT AND IMMIGRATION CANADA

SYNOPSIS

8.1 Since May 1982, the Canada Employment and Immigration Commission (CEIC) has adopted action plans for examining its mission, putting a new planning and accountability process in place, analysing functional responsibilities and revitalizing employment services. It is too early to determine the extent to which these actions will have the desired effect.

8.2 **Organizational structure.** Generally, the dividing line between functional and operational responsibilities is not clear; respective roles in the two areas are not well defined or understood. Functional managers have not always ensured that there was a continuous monitoring of operations. The organizational structure makes it difficult to co-ordinate promotion of programs offered to the public.

8.3 **Planning.** In 1982, the Commission made important changes to improve the planning process and integrate it into the management process. However, there is still a need for this new process to provide information in the annual operational plans that will show clearly the links between these plans and the CEIC's overall objectives.

8.4 **Unemployment Insurance benefits.** The systems for Decision Monitoring and the Report on Hirings are working well. In the regions, however, managers do not ensure uniform application of quality control and quality assurance. In addition, the Commission does not analyse the overall cause of errors detected by this control. Investigation and control systems implemented by the Commission to reduce the number of overpayments are centred mainly on detection; the preventive aspect is neglected.

8.5 **Direct Job Creation.** Generally, contribution projects are selected in accordance with program objectives and criteria. However, for the three Direct Job Creation projects we examined, the monitoring of projects was not properly supervised and the results of the monitoring activities not adequately documented.

8.6 **Counselling and Placement.** The national Employment Services group exercises little direction or co-ordination over the regions. As a result of these and other weaknesses, it is difficult for the Commission to determine whether it is delivering the most appropriate programs to the clients who need them most.

8.7 **Personnel.** Human resource planning is not an integral part of the Commission's long-term planning process; the Commission does not determine its future

human resource needs in a detailed and systematic manner. Consequently, it cannot be sure that it has the human resources necessary and appropriate for the efficient and effective implementation of changes which might have to be made as a result of the economic situation. There is a duplication of effort in developing training programs and material because the Commission does not have in place the mechanisms needed to co-ordinate its training activities.

8.8 Systems and Procedures. In a period when the volume of benefit payments is high, the Systems and Procedures group carries out well its responsibilities for issuing unemployment insurance cheques. However, policies, directives and data processing standards are too general and not up to date.

8.9 Efficiency. The CEIC has developed standards, productivity measures and an information system to collect basic data, but efficiency was not being measured by the system.

8.10 Effectiveness. Since 1978, the quality of evaluation studies has improved. There is a growing use of these studies by the Commission, but at the time of our audit there was no procedure for following up recommendations made by the Evaluation group.

8.11 Internal Audit. Management of Internal Audit does not have a staffing plan to ensure that its staff will have the necessary competence, experience and specialization to provide effective services to the Commission.

8.12 Information for Parliament. The deficit of the Unemployment Insurance Account for the 1982 period exceeds \$2.5 billion, and forecasts indicate another major deficit for 1983.

Overview

8.13 In 1977, the Employment and Immigration Reorganization Act united the Department of Manpower and Immigration and the Unemployment Insurance Commission to form the Canada Employment and Immigration Commission (CEIC) and the Department of Employment and Immigration.

8.14 The Commission is responsible for all employment, unemployment insurance and immigration programs; the Department is responsible for ensuring that federal employment and immigration policies and programs are developed and implemented effectively and for providing information on these to the public.

8.15 The National Headquarters of the Department and the Commission is located in Hull. The operations of the Commission are decentralized and are carried out in 10 regional offices and more than 800 permanent and temporary service points. The Commission uses some 27,000 person-years.

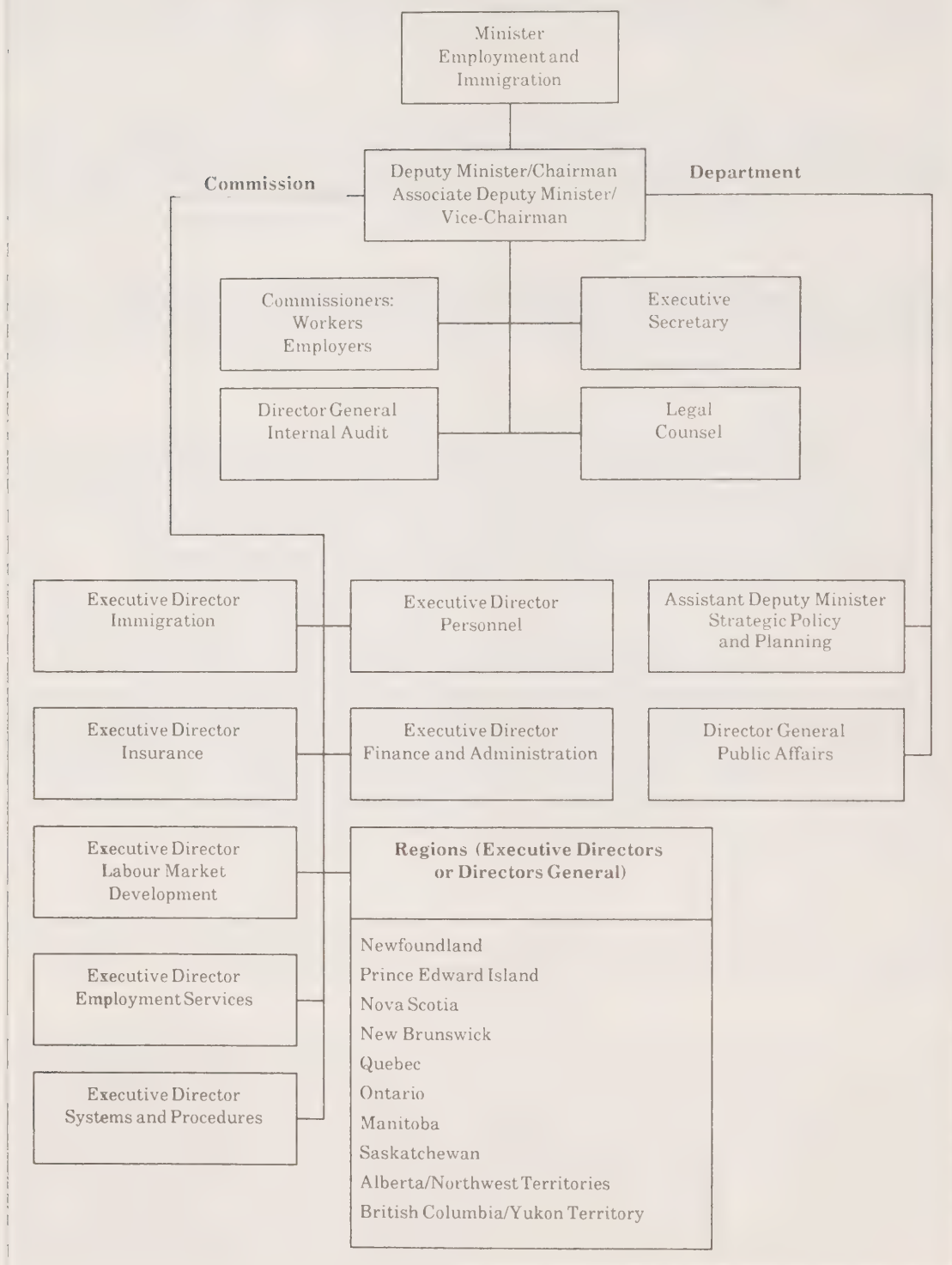
8.16 The Department's two divisions – Strategic Policy and Planning and Public Affairs – are located at National Headquarters. Although most Employment and Immigration activities are carried out by the Commission, a Department of Employment and Immigration was created so there would be a minister responsible for the portfolio and the traditional relationship with the central agencies would be maintained.

8.17 In addition to the Chairman and Vice-Chairman, the Commission has two Commissioners, one appointed in consultation with organizations representing workers and the other in consultation with organizations representing employers. This structure allows labour and management to be represented in formulating, approving and implementing programs affecting employers and workers. The National Headquarters is made up of seven groups. Four of these are concerned with programs offering services to the public – Employment, Insurance, Labour Market Development, and Immigration. The other three – Personnel, Finance and Administration, and Systems and Procedures – provide professional, technical and administrative services.

8.18 The organization chart of Employment and Immigration Canada, set out in Exhibit 8.1, shows the structure of the Commission and the Department.

8.19 The Commission administers four programs: Employment and Insurance, Immigration, Annuities, and Administration. The objective of the Employment and Insurance program is to further the attainment of Canada's economic and social goals by realizing the full productive potential of human resources. The Employment Services, Insurance and Labour Market Development groups manage this program. The Immigration program administers the admission of immigrants and visitors in accordance with the economic, social and cultural interests of Canada. The Annuities program administers contracts entered into under the Government Annuities Act. This program is administered

**EMPLOYMENT AND IMMIGRATION CANADA
SUMMARY ORGANIZATION CHART - 31 MARCH 1983**



by the New Brunswick region. The objective of the Administration program is to provide efficient and timely support services to the Department and the Commission.

8.20 Funding from parliamentary appropriations for both the Department and the Commission is provided in the government Social Affairs envelope. A summary of the funds administered and disbursed by the Department and the Commission for 1982-83 is given in Exhibit 8.2. Allocation of person-years is given in Exhibit 8.3.

Audit Scope

8.21 The objective of our audit was to determine the extent to which due regard for economy and efficiency was being addressed in the management of Employment and Immigration Canada. In addition, we examined the procedures in place for measuring the effectiveness of its activities.

8.22 CEIC has a highly decentralized structure. National Headquarters provides functional guidance and services to regions; the regions are responsible for providing services and programs to the public. We analysed the organizational structure of CEIC in the context of this relationship.

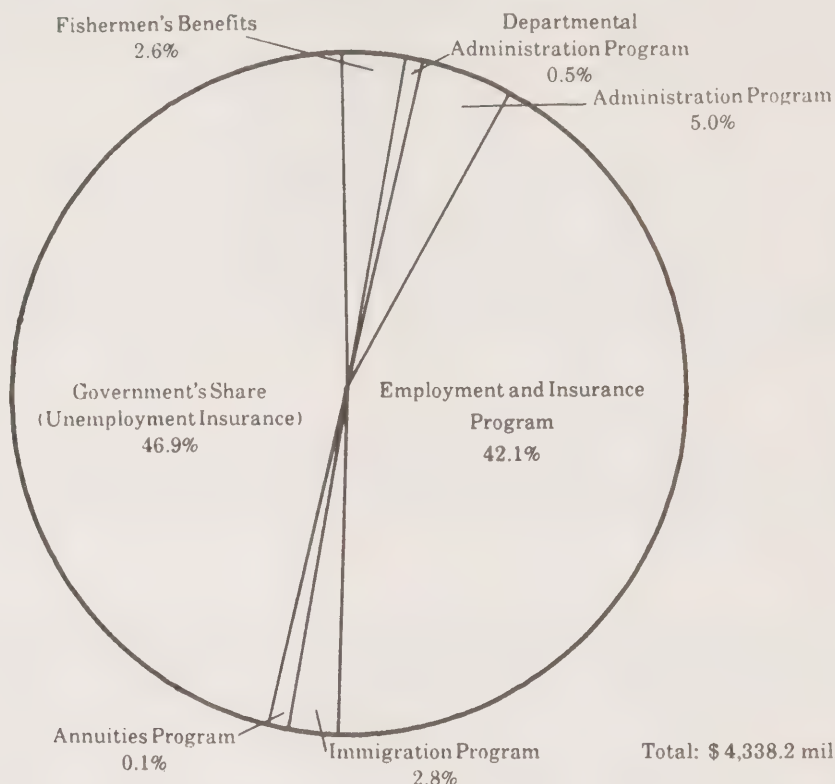
8.23 We examined strategic and operational planning procedures, human resource planning, and electronic data processing planning and system development. We also reviewed the operational control mechanisms for Employment and Insurance program activities, such as Insurance Benefits Services, Direct Job Creation and Employment Services; the management process for personnel training; and the procedures for controlling and evaluating CEIC's operations.

8.24 We visited National Headquarters, 5 of the 10 regional offices – Nova Scotia, Quebec, Ontario, Manitoba and British Columbia – and more than 30 Canada Employment Centres (CECs).

8.25 Last year, the Immigration Program was the subject of a comprehensive audit by our Office. It was reported in Chapter 7 of the 1982 Report.

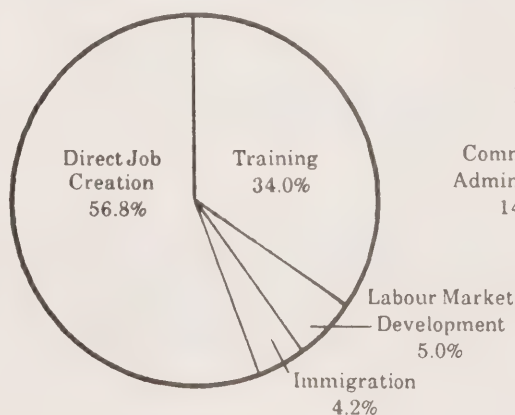
8.26 Since the arrival of a new Deputy Minister/Chairman in May 1982, the Commission has adopted action plans and taken several corrective measures. These include examining CEIC's mission, adopting a new planning and accountability process, analysing functional responsibilities and undertaking a project to revitalize employment services. It is too early to determine the extent to which these actions will have the desired effect.

**FUNDS ADMINISTERED AND DISBURSED BY
EMPLOYMENT AND IMMIGRATION CANADA
1 APRIL 1982 TO 31 MARCH 1983**



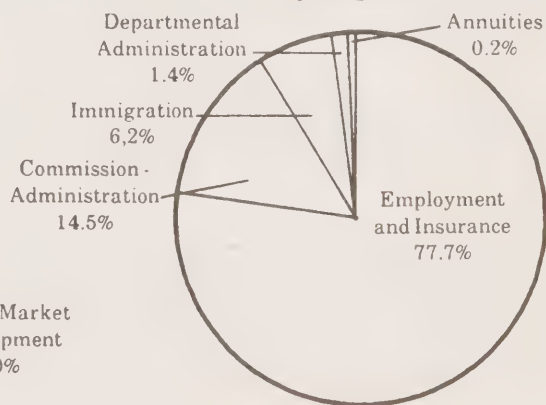
* Includes administration costs charged to the Unemployment Insurance Account (\$790.3 million) but does not include the benefits paid in 1982 (\$8.4 billion)

Grants and Contributions



Total: \$678.2 million

**Operating and Capital Expenditures
by Program**

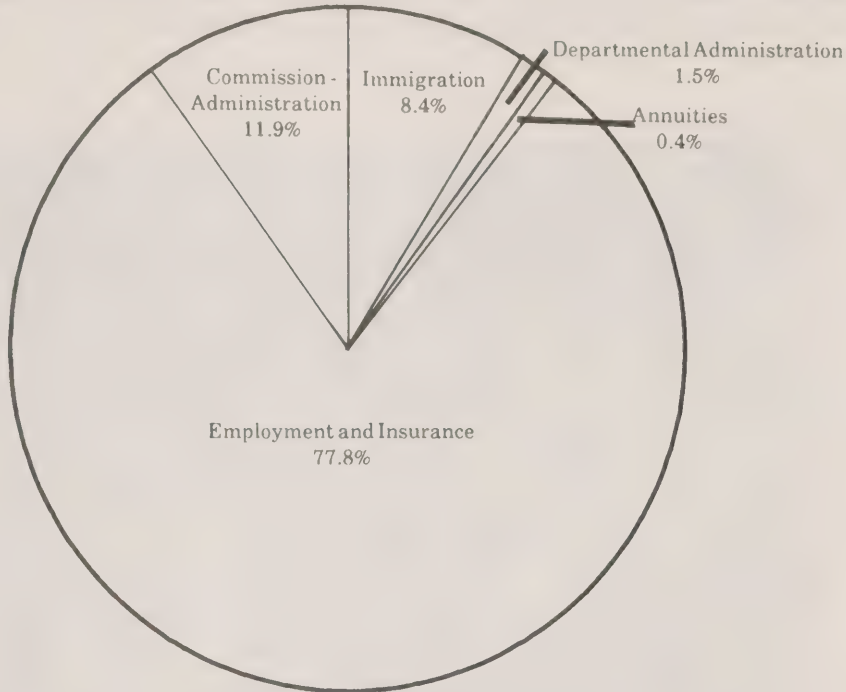


Total: \$1,511.8 million **

** Includes the cost for purchasing courses from the provinces (\$489.6 million)

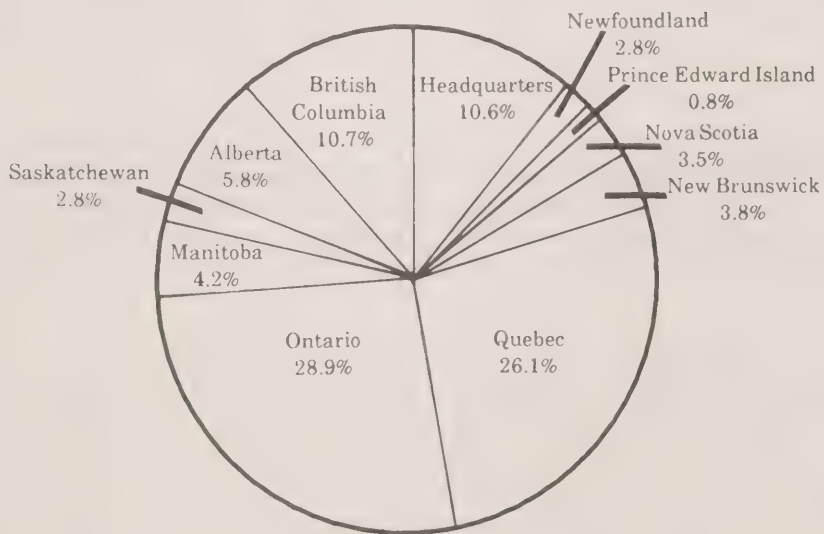
**EMPLOYMENT AND IMMIGRATION CANADA
ALLOCATION OF PERSON-YEARS
1982-1983**

Program



Total: 26,509 person-years

Geographical



Total: 26,509 person-years

8.30 We examined the organizational structure, including operational and functional components, and their interaction, to determine whether they were conducive to planning, decision-making, control, communication and accountability. This included examining the operations of both the Department and the Commission with regard to the objectives and responsibilities stated in their governing legislation. We also examined a sample of management positions at National Headquarters and in the regions, with regard to the definition of their roles, responsibilities, authority and involvement in the decision-making process.

8.31 At the time of our audit, we noted that the dividing line between functional and operational responsibilities was not clear; roles for the respective functions were similarly not well defined or understood. Functional managers have not always ensured that there was continuous monitoring of operations. As a result, operational managers were similarly not always held accountable for operating with due regard to economy, efficiency and effectiveness. For example, in January 1983, in the different regions, the ratio between support personnel (finance, administration, personnel and public affairs) and the personnel serving the public varied greatly. These ratios are shown below:

<u>Regions</u>	<u>Support</u>	<u>Serving Public</u>
British Columbia	1	7.9
Alberta	1	8.5
Saskatchewan	1	5.2
Manitoba	1	6.3
Ontario	1	10.9
Quebec	1	7.0
New Brunswick	1	4.5
Nova Scotia	1	5.8
Prince Edward Island	1	3.0
Newfoundland	1	4.8
National average, including National Headquarters	1	5.0

8.32 The Commission should examine its definitions of management roles to ensure that they provide clearly and precisely for accountability and follow-up action.

Management's comments: Employment and Immigration Canada (EIC) has just completed a reorganization to provide a clearer enunciation and clarification of assigned responsibilities of the National Senior Executive Heads. In conjunction with this reorganization EIC is currently establishing an updated policy of functional direction and authority which will further define specific responsibilities at the executive level of the organization. In addition EIC has implemented a Planning and Accountability Process which establishes the required linkages between the planning, budgeting, controlling and evaluation aspects of management and puts into place through the establishment of individual Managerial Contracts with executive levels the framework necessary for ensuring accountability throughout the organization.

8.33 We observed that there continue to be difficulties resulting from the fusion in 1977 of the Unemployment Insurance Commission and the Department of Manpower and Immigration. Because of the recent economic situation, there has been a rapid growth of new programs and a consequent need for additional human and financial resources. Decentralization, which has come about for geographic and political reasons, requires the involvement of a larger number of people.

8.34 In the past few years, many new initiatives were taken rapidly to reduce social and economic hardships. Numerous programs, many of a limited duration, were set up to deal with specific situations. To execute these programs, separate temporary modules were created. When the programs acquired a more permanent status, the modules were incorporated in parallel with the existing structure. Such a structure requires a large number of experts, advisers, co-ordinators, analysts, liaison agents and so on.

8.35 The organizational arrangements result in a sporadic and unco-ordinated promotion of programs for the public and unclear liaison activity. Employers can, as a result, be contacted by several different officers of the Department or the Commission.

8.36 In evaluating their organizational structure, the Department and the Commission should give special attention to co-ordinating promotional activity and communication with the public.

Management's comments: Recognizing the need for continuous review of its programs to ensure that they meet the needs of its clients, EIC has undertaken two specific initiatives in this area. Firstly, a revitalization of its Employment Services activities, to provide an orientation of these activities more clearly focused on the employers' needs and requirements. Secondly, a consolidation of the various job creation programs administered by EIC, to enable a more precise rationalization of these programs with respect to overall government priorities.

Strategic and Operational Planning

8.37 The Commission continues to implement the elements of a good strategic and operational planning system. The planning process has been improved in the past few years, particularly since late 1982. However, the Commission had not yet defined a method of monitoring the implementation of work plans and operational plans during the year.

8.38 **Strategic planning.** The Planning Environment Document (1982-87) does not provide enough information for strategic planning. The information collected and used for analysing the environment and preparing the document did not include an analysis of CEIC's strengths and weaknesses, identify issues, challenges and alternative strategies, or integrate results from program evaluations and internal audit. In addition, the process for developing the document involved relatively few people in National Headquarters and regional support groups. Senior program and operational management was not sufficiently involved in the process.

8.39 Without a structured process that involves senior management and more complete information, strategic and operational plans may not address, sufficiently ahead of time, the significant social and economic issues that will have an effect on CEIC.

8.40 CEIC should ensure that the planning process:

- involves greater participation by senior management;
- includes an overall assessment of CEIC's strengths and weaknesses and identifies issues, challenges and alternative strategies; and
- incorporates the results of program evaluations and of internal audits.

Management's comments: The EIC Planning and Accountability Process explicitly calls for the formal involvement of senior management at two Executive Meetings, and the implementation of an Environmental Assessment Committee will ensure additional input. The overall assessment of EIC's strengths and weaknesses, the identification of issues and challenges as well as alternative strategies will be an integral part of the Planning Environment Document. The results of program evaluations and internal audits will be incorporated in the Planning Environment Document.

8.41 **Operational planning.** The present planning process does not ensure that long-term operational plans are linked to objectives, short-term operational plans and resource requests. CEIC cannot determine systematically whether long-term plans of various groups and regions are co-ordinated and will therefore contribute to achieving its mission and overall objectives. In addition, it is difficult to determine whether short-term plans and resource allocations will provide for achievement of CEIC's priorities, objectives and long-term plans.

8.42 CEIC's planning process should link long-term operational plans to objectives, to short-term plans, and to resource requests.

Management's comments: The emphasis has so far been placed on implementing the process for the next planning year, and the longer-term operational planning remains to be addressed. It is anticipated that this will be developed in the context of a revised Operational Planning Framework and the Multi-Year Operational Plan.

Programs

Unemployment Insurance

8.43 **Environment.** The Unemployment Insurance program is governed by the provisions of the Unemployment Insurance Act of 1971 and the Unemployment Insurance Regulations. The objective of this program is to provide temporary assistance to the

unemployed while they are looking for work or are unable to work because of illness, disability or pregnancy. This objective requires CEIC to deal with a variety of economic conditions. Exhibits 8.4 and 8.5 set out the major results of CEIC operations in the field of Unemployment Insurance from 1978 to 1982.

8.44 Unemployment Insurance services are provided by regional offices and 272 Canada Employment Centres across the country. National Headquarters has functional authority over the regions in carrying out the program.

8.45 The Unemployment Insurance Program is made up of six distinct groups of activities:

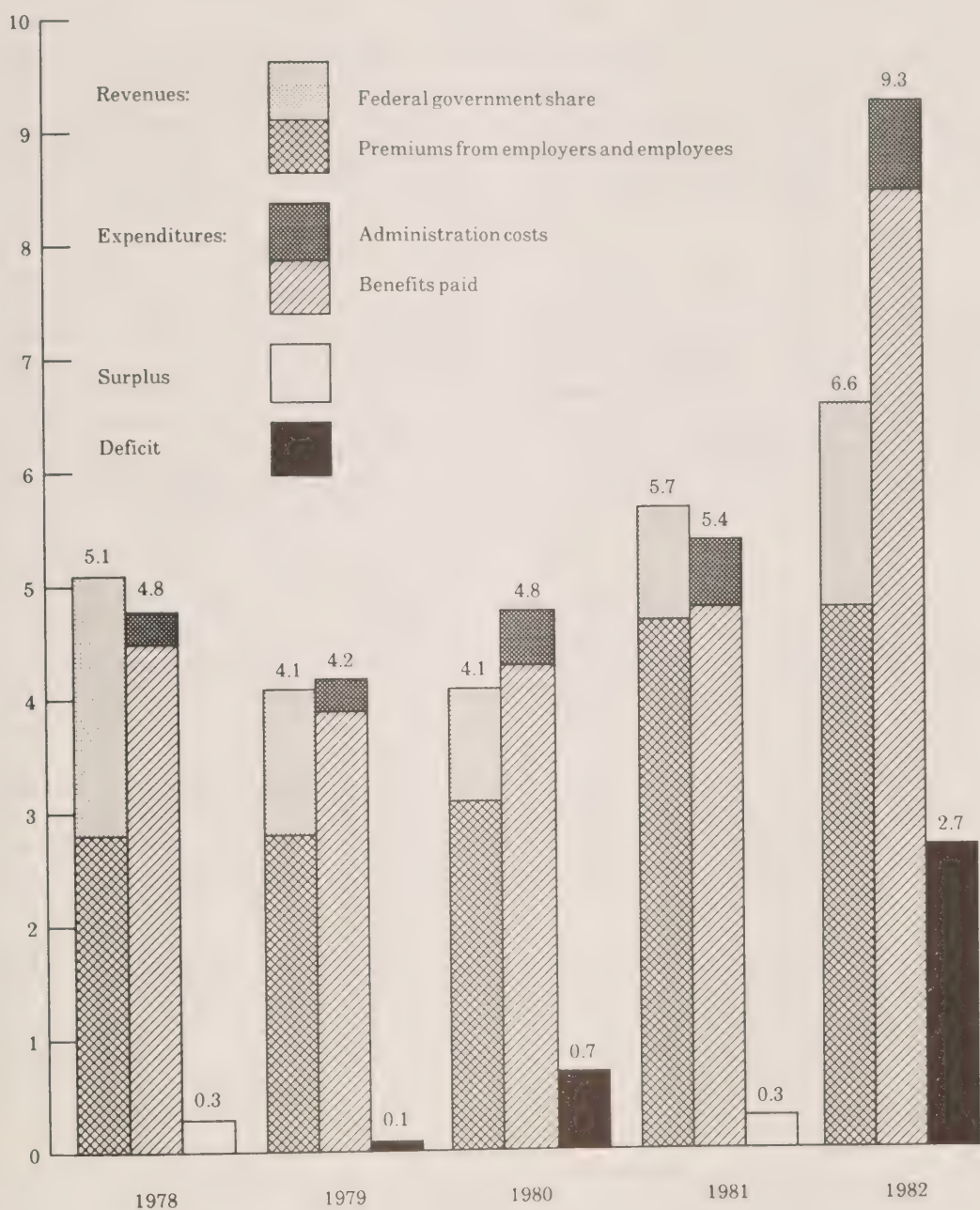
- **Claims processing** - includes all the activities related to determining eligibility for Unemployment Insurance benefits.
- **Investigation and Control** - involves implementing policies and procedures designed to prevent, detect and deter dishonest or fraudulent practices.
- **The Interview program** - is a control procedure to verify systematically the initial and continuing eligibility of claimants.
- **Regional Computer Centres** - are responsible for data processing installations as well as for data processing operations and payment of benefits.
- **Premium reduction and revenue collection** - involves processing applications for reduction of unemployment insurance premiums, registering qualified employers with Revenue Canada-Taxation, and operations related to the transfer to the Commission of premiums collected by Revenue Canada.
- **Policy development** - involves maintaining the legislative base of the Unemployment Insurance program and developing related policies and procedures.

8.46 **Audit scope.** Since 1977, the Auditor General has reported significant weaknesses in the Benefit and Overpayment System of the Unemployment Insurance Account. The Office has carried out a number of studies in an attempt to quantify the monetary value of the errors in the benefits paid – errors which can be attributed to control weaknesses. The results of the latest study were reported in paragraph 15.34 of our 1982 Report.

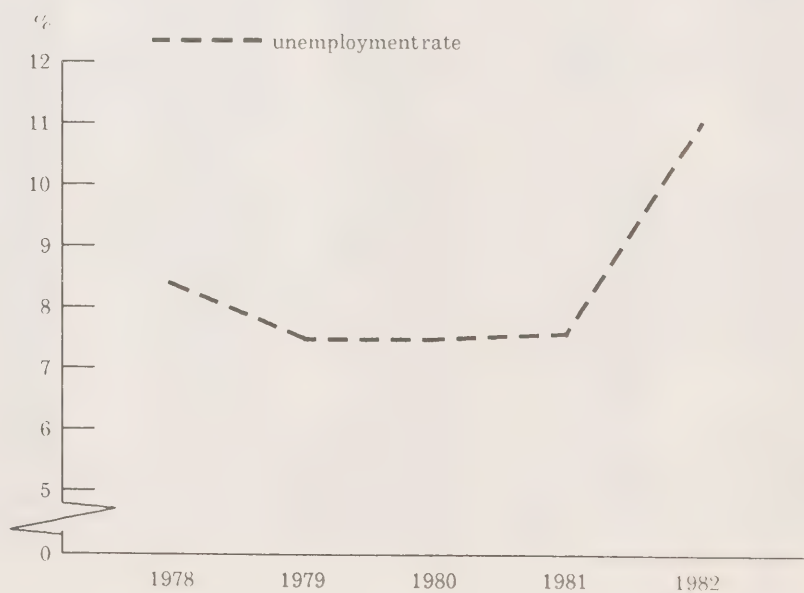
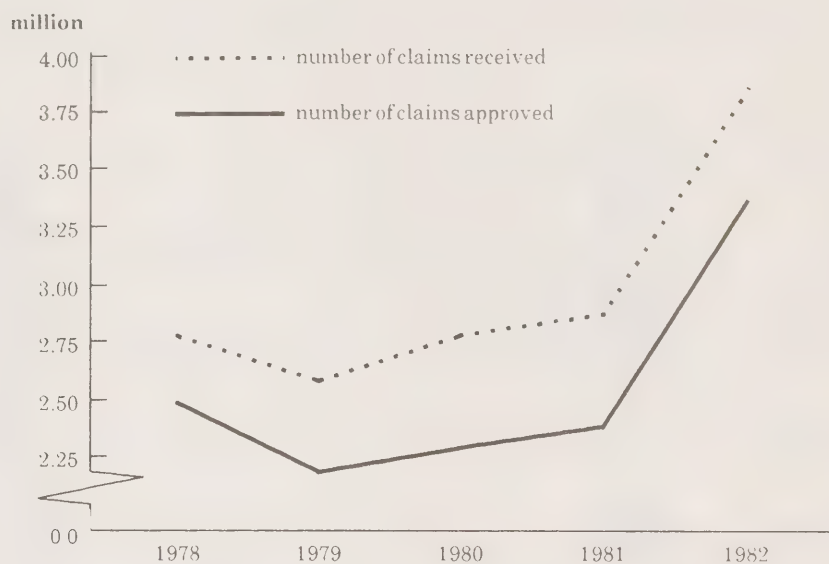
8.47 In 1978, the Commission began corrective action to remedy these control deficiencies. The Record of Employment was modified, and our 1982 study showed that this resulted in a decrease in the estimated amount of overpayments.

**REVENUES, EXPENDITURES AND SURPLUS / DEFICIT
UNEMPLOYMENT INSURANCE ACCOUNT
1978 to 1982**

\$ billions



UNEMPLOYMENT INSURANCE PROGRAM CLAIMS RECEIVED AND APPROVED 1978 to 1982 AND UNEMPLOYMENT RATE DURING THE SAME PERIOD



8.48 The Commission also introduced the Decision Monitoring system and the Report on Hiring system and modified the quality control and quality assurance procedures. We therefore focused our audit on these systems as well as on the Investigation and Control and the Interview program activities.

8.49 We visited National Headquarters and six CECs in each of the five regions audited and analysed 576 claimant files for 1982.

8.50 **Decision Monitoring.** The Decision Monitoring system was put in place in 1979 to verify that all applications for benefits and all decisions processed by the Regional Computer Centre had been properly authorized and approved by agents and properly recorded. This system was operating satisfactorily in the regions we visited. It satisfied the control requirements for processing benefits and supplied adequate information to control backlogs.

8.51 **Report on Hiring.** The Report on Hiring system involves asking employers to supply to the Commission, on a voluntary basis, information on newly hired employees. This helps the Commission to identify claimants who are employed or who have unreported income. In 1982-83, the Commission recruited more than 15,000 new employers, bringing the total number of participating employers to 71,500 out of a possible 550,000; that is, to 13 per cent of all employers. This new control has identified \$12 million in overpayments of Unemployment Insurance benefits. This initiative was successful and we encourage CEIC to continue its efforts to solicit employers' participation in the program.

8.52 **Quality control and quality assurance.** Quality control is the means used to ensure that the work done on a benefit claim is complete, accurate, reviewed, processed and communicated without delay to the claimant. This is done at the CEC level by Insurance Services advisers before benefits are paid.

8.53 Quality assurance, or evaluation of the quality control function, is also carried out at the CEC and involves checking the claims that were subjected to quality control. This operation only occurs when the processing of the benefit claim is complete, but it must be done in each CEC at least once a year by regional Insurance Services advisers.

8.54 National Headquarters has not enforced the requirement that the regions implement the quality control program, and four of the five regions visited had not attained the standards of the program. CEIC reports show an overall decrease of 18 per cent in the number of benefit claims which were subject to quality control. At the same time, initial applications for benefits had increased 21 per cent.

8.55 The Commission is not certain that all benefits paid are subject to the same level of review and that all errors and problems have been identified. Quality control has not achieved the improvement in the quality of processing benefit claims expected by the

Commission. We believe that, in a period when there is a heavy volume of benefit payments, application of this control is particularly necessary to identify errors caused by the high volume.

8.56 The error rate identified by quality control was 23.8 per cent at 31 March 1983; this has not changed since 1981. Of these errors, 31.7 per cent would have resulted in overpayments and 16.2 per cent in underpayments, the remainder having no monetary effect.

8.57 Because quality assurance checks were not always carried out, review of quality control was not adequate in two of the five regions visited. In addition, the error rate identified by quality assurance in files already reviewed by quality control was 17.2 per cent for the fiscal year 1982-83. Of these errors, 32.8 per cent had a monetary effect.

8.58 It is obvious that the problems identified by quality control and quality assurance are not being corrected, in spite of the training given to Insurance Services personnel. We did not find any system in place to evaluate the effectiveness of the training provided to Insurance Services personnel on the basis of problems identified by quality control and quality assurance.

8.59 In carrying out the quality control and quality assurance functions, it is important to have experienced personnel. However, some of the regions we visited relied solely on the experience of Insurance Services advisers and also did not use checklists to ensure a uniform and complete application of the quality control and quality assurance functions.

8.60 National Headquarters should:

- take the steps necessary to ensure that quality control and quality assurance are implemented in all regions and that all regions adhere to the standards which are set;
- ensure that the effectiveness of training given to Insurance Services personnel is evaluated; and
- design a checklist to allow for a uniform and complete review of claimant files.

Management's comments:

- *A revised Quality Control/Quality Assurance policy was released to Regions on June 29, 1983 to provide additional guidance on policy compliance. NHQ monitoring of regional policy compliance will continue, and explanations and plans for corrective action requested where warranted. Monitoring by Insurance Services will also be strengthened.*

- *EIC has recently established a training co-ordinator to co-ordinate all Insurance Group training issues and initiatives. Functional direction to Regions will be reinforced in terms of devoting sufficient time to follow-up training of monitors and Agents.*
- *A national checklist is currently in preparation for release to the Regions in the fall of 1983.*

8.61 National Headquarters is responsible for setting policies for the Unemployment Insurance program. However, the regions are not required to report more than statistics on quality control and quality assurance. Trends are brought to the attention of National Headquarters at the discretion of regional managers, since there is no requirement that they provide narrative reports identifying trends in their regions. The reporting system in place is not adequate to ensure that the functional group in National Headquarters has all the information necessary to evaluate the quality control and quality assurance functions, identify problems with national implications, or identify the more common causes of errors which result in overpayments and underpayments. As a result, the Commission has difficulty in taking appropriate corrective action.

8.62 We also noted that there was no procedure in place to allow Insurance Services advisers to ensure that all errors identified had been corrected. Consequently, the possibility exists that overpayments and underpayments which have been identified by quality control and quality assurance will not be recorded and collected or paid.

8.63 National Headquarters should:

- **set up a reporting system to provide the information necessary to analyse the causes of overpayments and underpayments so it can identify the appropriate corrective action to take. The reporting system should also provide the information necessary for evaluating the quality control and quality assurance functions in the regions; and**
- **institute procedures to ensure that adequate steps are taken when an overpayment or an underpayment is identified.**

Management's comments: The recently implemented Comprehensive Tracking System is EIC's primary instrument for error trend detection at the national and regional levels. Remedial action is taken by Regions where appropriate, or by NHQ should a policy or program design factor be the cause.

8.64 **Investigation and Control.** The objectives of Investigation and Control are to prevent, detect and deter abuses and fraudulent practices regarding Unemployment Insurance benefits. However, the emphasis has been on detection rather than on prevention and deterrence. Of 16 projects undertaken by Investigation and Control at National Headquarters during 1982-83, only 2 can be considered as preventive, and they were dropped. Also, CEIC has not attempted to measure the deterrent effect of the control

systems in place. Consequently, the Commission has neglected the development of systems and procedures which could prevent and deter fraud and abuse of the Unemployment Insurance Benefit system. Approximately 80 per cent of available human resources are assigned to detection of overpayments.

8.65 The functional group at National Headquarters has not carried out sufficient studies to enable it to evaluate the possible impact of the detection activities of Investigation and Control on the degree of compliance with the Unemployment Insurance Act, 1971. Without such studies, it is difficult to assess the impact of Investigation and Control activities.

8.66 In 1982-83, the Commission determined that, for each dollar spent on Investigation and Control activities, it identified \$2.81 in overpayments. However, there was no analysis to establish whether this was the most cost-effective combination of investigation activities. Although the value of overpayments identified increased by 37 per cent from 1981 to 1982, without an analysis of the effectiveness of the Investigation and Control activities it is difficult to attribute this increase to the quality of investigation, since the value of benefits paid during 1982 increased by 76 per cent.

8.67 National Headquarters should:

- determine the effectiveness of the various Investigation and Control activities;
- determine if prevention and deterrence are more cost-effective than detection; and
- undertake a study to measure the effect of Investigation and Control activities with respect to compliance with the Act.

Management's comments:

- *The current mix of control programs is based on specific policies and cost benefit analysis with respect to the various programs, based on such ratios as cost per investigation, overpayment per investigation, disentitlement/disqualification ratios and rate of return. A cost effectiveness study of the Computer Post Audit program is also being prepared and additional effectiveness measuring reviews are planned.*
- *EIC has undertaken a review of the concepts of prevention, deterrence and detection as they relate to the mandate of the Control Branch.*
- *EIC has initiated an analysis in its Operational Plan for 1983-84 designed to identify the nature, characteristics and extent of non-compliance. A proposed Record of Offences System will provide information about the characteristics of non-compliance.*

8.68 The activity reports sent to the National Headquarters functional group by the regions contain statistical data only. They do not contain any analysis of resource utilization or descriptive data which would allow the National Headquarters group to identify trends and potential problems. Because National Headquarters does not require this information, it cannot identify items with national implications that might require its attention. It also does not have all the information required for developing new policies or improving existing policies.

8.69 National Headquarters' Investigation and Control group should develop an information system to provide adequate information for carrying out its mandate.

Management's comments: Investigation and Control results are being computerized and Quality Control/Quality Assurance information will be integrated into the reporting system. Also a management system is being developed to provide budgeted versus actual information by region and by program on resources utilized, activities carried-out and results obtained.

8.70 **Interview program.** The objective of this program is to ensure that claimants are available for work and to confirm, through interviews, that they are eligible for benefits. The application of the Interview program has often been restricted in the regions because of the large number of claimants. Regional management has restricted its application to categories of claimants in demand occupations or to those going from one type of claim to another. Our audit indicated that three of the five regions visited carried out less than 75 per cent of the total interviews planned at the beginning of the year. In our opinion, the restricted application of the Interview program leaves too many claimants without contact with CEIC agents for long benefit periods. This situation could lead to abuse.

8.71 National Headquarters should review the Interview program policy regarding the appropriateness of the selection of claimants to be interviewed.

Management's comments: A revised policy with regard to the application of the Interview Program was issued to the Regions in June 1983.

8.72 **Record of Employment (ROE).** Our 1978 Report identified serious deficiencies in the Record of Employment system. Our current audit showed that the Commission has remedied most of these deficiencies satisfactorily. However, we noted that National Headquarters eliminated the computerized control of blank ROEs in October 1982, but did not replace the control. Each region has had to devise and implement its own system. ROE controls in three of the five regions visited were weak. It is essential that the Commission control these forms adequately, since they form the basis for calculating the benefits to be paid and the length of time they will be paid.

8.73 National Headquarters should issue guidelines on the control of blank Record of Employment forms.

Management's comments: Manual procedures for the control of the issuance of blank Records of Employment have been developed and a monitoring methodology for this system is presently under consideration.

8.74 Unemployment Insurance Account. Our audit report to the Minister of Employment and Immigration on the financial statements of the Unemployment Insurance Account for the year ended 31 December 1982 disclosed that unidentified overpayments and underpayments still exist.

Labour Market Development

8.75 Environment. Labour Market Development includes activities which have the objective of adapting Canada's human resources to its manpower needs and providing workers with the opportunity to obtain better paying, more regular and more satisfying employment. In addition, the Commission must create employment for unemployed and disadvantaged workers and seek a better balance between supply and demand of qualified labour in Canada.

8.76 To attain these objectives, CEIC is responsible for carrying out the Employment Training, Direct Job Creation, and Labour Market Planning and Adjustment programs through its Labour Market Development group and the regions.

8.77 National Headquarters prepares and defines national policies for these programs, provides functional guidance to the regions, and controls and monitors application of the policies in the regions. Regional Headquarters, the Job Creation branches and the CECs are responsible for program delivery.

8.78 Employment Training includes Institutional Training – which involves management of adult occupational training allowances and purchase of courses from the provinces – Industrial Training, Critical Trade Skills Training, and the Skills Growth Fund.

8.79 Direct Job Creation includes management and support of 12 contribution programs aimed at job creation. The most important of these are the New Employment Expansion and Development (NEED) program, Canada Community Development Projects (CCDP), Summer Canada, Unemployment Insurance job creation projects, the Local Employment Assistance Program (LEAP), and the Program for the Employment Disadvantaged.

8.80 Labour Market Planning and Adjustment includes the Manpower Consultative Service, Work Sharing, Industry and Labour Adjustment programs, Canadian Industrial

Renewal programs, Agricultural Employment programs and Foreign Workers Policy and Human Resource Planning initiatives.

8.81 Audit scope. Our audit of the Labour Market Development sector was concentrated on two activities of this program – Direct Job Creation and Labour Market Planning and Adjustment.

8.82 We audited the selection and monitoring of job creation projects in the Nova Scotia, Quebec and British Columbia regions. We also examined the CCDP, LEAP and Summer Canada programs, which account for approximately 65 per cent of total Direct Job Creation expenditures. At the time of our audit, the NEED Program, which is now very important, had just been announced and was too new to be included in our audit.

8.83 For Labour Market Planning and Adjustment, we examined the Work Sharing program. This program expanded during 1982; \$83 million in benefits was paid through the Unemployment Insurance Account. We conducted these audits at National Headquarters, in regional offices in Nova Scotia, Quebec, Ontario and British Columbia, in the regional Employment Development Branches and in CECs.

8.84 Selection and monitoring of contribution projects. CCDP has existed since 1980, and its objective is to create term employment opportunities in high unemployment areas. Projects must support national and provincial priorities.

8.85 LEAP started in 1973 and aims at employment and skills development for disadvantaged groups, particularly women, natives, the disabled and those living in remote areas. Projects may be funded for a maximum of four years.

8.86 Since 1980, Summer Canada has created career-oriented jobs for students. This is done by supporting projects sponsored by local non-profit organizations or by federal departments and agencies.

8.87 Wages and overhead costs for projects under these three programs are paid by contributions. Under LEAP, contributions can also cover capital expenditures.

8.88 Our examination of the selection of contribution projects covered Summer Canada and CCDP. Our audit showed that project selection for these programs complied with criteria, job creation objectives and CEIC's procedures.

8.89 Our findings are different for monitoring of projects, where we examined three programs. CEIC's operational guides and checklists, and the narrative report forms prepared in the regions using these guides, do not provide information needed by project

officers on how to test expenditures for account verification purposes. For example, determination of the extent of testing and choice of high-value items are not covered. Also, financial checklists do not specify clearly enough the requirement to ensure that expenditures are related to project activities.

8.90 Reports prepared by regional project officers on monitoring visits to contribution projects for the three programs examined did not provide enough information on the extent of expenditures examination and monitoring work performed. They also did not provide supervisors with the information necessary for assessing the quality of the work done during the visit.

8.91 CEIC directives covering the monitoring of contribution projects do not require the preparation of a schedule for either regular or financial monitoring visits. Without visits at appropriate intervals, projects in difficulty may not receive the support they need to improve the situation, and action may not be taken to stop payments of contributions where necessary.

8.92 Supervision of monitoring activities for the three programs examined showed several weaknesses. Many on-site monitoring visit reports were not signed by supervisors as proof of review; supervisors accepted incomplete financial monitoring reports; and final reports were not always requested from project sponsors. In addition, many LEAP files which we audited were not correctly set up – their content was not uniform from project to project, and documents were not accurately filed. These weaknesses indicate failure to follow CEIC procedures and Treasury Board terms and conditions, which could lead to payments that are not allowable under the agreement.

8.93 **National Headquarters should establish directives for:**

- **determining the extent of account verification work for contribution projects;**
- **requiring that work carried out during monitoring visits is well documented;**
- **establishing overall visit schedules; and**
- **outlining requirements for the adequate supervision of monitoring activities.**

Management's comments: EIC agrees with the recommendation; guidelines and instructions will be developed.

8.94 **Work Sharing.** The objective of the Work Sharing program is to avoid lay-offs by providing income support payments and Unemployment Insurance benefits to those who are prepared to share their jobs by working only part time. To this end, the employees, the

employer and CEIC must enter into an agreement. This program was reintroduced at the end of 1981 and was scheduled to terminate in May 1983; however, because of economic conditions, it was extended until May 1984.

8.95 The Internal Audit Bureau of CEIC audited this program a few months before our examination. Although several weaknesses noted by the internal auditors had been corrected at the time of our audit, some still remained.

8.96 Our audit revealed that monitoring of compliance with the conditions of agreements between employers and employees is not systematic, planned and organized. This is because CEIC directives on monitoring of agreements are not precise, and no useful management information system has been developed. As a result, it is possible that CEIC can continue agreements although employees or employers have ceased to comply with the terms and conditions.

8.97 National Headquarters should develop directives to specify the scope of monitoring work to be performed on work sharing agreements and establish a useful management information system.

Management's comments: An automated monitoring system has been developed and is in use. This system contains all information on the benefits and data related to the agreement. A more general guideline on monitoring is also being prepared.

8.98 CEIC directives require that quality control should be exercised on Work Sharing decisions. However, in three of the four regions visited, quality control activities had not been carried out in any of the CECs since the program was reintroduced in 1981. Without this quality control, there is an increased risk of errors and overpayments.

8.99 National Headquarters should ensure that quality control is exercised in all regions on eligibility decisions for the Work Sharing program, as required by CEIC directives.

Management's comments: Work Sharing claimants files are now subject to the same quality controls as are regular Unemployment Insurance Benefits.

Employment Services

8.100 **Environment.** Employment Services delivers certain CEIC programs and provides services to employers and job seekers through its national network of Canada Employment Centres. The person-year forecast for this activity in 1983-84 is 4,760. The main programs delivered by Employment Services are Outreach and Manpower Mobility. Services provided include placement, counselling, registration and listing of job vacancies.

8.101 Employment Services objectives are to:

- assist and effect placement of job seekers in job vacancies;
- encourage mobility of persons with skills that are in demand; and
- identify special clients (women, natives, handicapped, etc.) and help them locate services and obtain employment.

8.102 Employment services are delivered mainly by employment counsellors. They must have a good knowledge of CEIC Employment Services objectives, the programs offered and the labour market. These people are sometimes counselling specialists and sometimes placement specialists. They require all these techniques in their activities with clients – employment counselling, selection counselling and registration for training.



Employment services delivered by employment counsellors

8.103 The emphasis in the past few years on positive action, combined with the general economic situation, has complicated the employment counsellors' job.

8.104 At the time of our audit, the labour market was providing few job offers. Because the number of placements has been declining for several years, some regions instructed their counsellors to try to develop the market by soliciting employers to increase the number of job offers. Other regions have tried to transfer some of their Employment Services resources to the Unemployment Insurance program.

8.105 **Audit scope.** In our audit, we tried to determine what strategies and objectives existed for the Employment Services function and to what extent the strategies were being followed. We also examined the management processes used to develop and evaluate the quality of placement and counselling activities and the performance of employment counsellors. We visited a number of CECs in the five regions we audited.

8.106 **Counselling and Placement.** The scope of the CEIC's mandate, management's emphasis on certain activities and the pressure from minority groups have led to Employment Services and Labour Market Development setting up a multiplicity of programs, tools and services. However, the Commission has not rationalized the programs and services that employment counsellors offer to employers and job seekers.

8.107 Our examination revealed the absence of a national strategy for dealing with employers as clients. For example, determining the objectives to be achieved in terms of overall market penetration and target industrial sectors is done only on the initiative of the regions. Although encouraging efforts were being made in some regions and at the local level to develop marketing approaches, no overall strategy for development of this function was evident. Without a national strategy, it is difficult for CEIC to determine whether it is delivering its services to the clients who need them most and whether it is offering these clients the most appropriate programs. Thus, it is difficult to get the right match between the services offered by the CEIC and the needs of employers and to measure the efficiency and effectiveness of these activities.

8.108 Also, National Headquarters has not given regular and full functional direction in the regions. For example, the orientation given to staff who deliver employment services is not well directed. In addition, activities of employment counsellors vary among regions and even among CECs; the counsellor can be either a counselling or placement specialist, a specialist in employer visits or a generalist. As a result, services given by employment counsellors lack uniformity, and national objectives might not be pursued.

8.109 The Commission should develop a national strategy for providing required services to job seekers and employers at the regional level. National Headquarters should clearly exercise its functional direction role.

Management's comments: A national strategy will be developed as part of the Revitalization of Employment Service including a clarification of roles and responsibilities.

8.110 During our audit, we examined files for both job seekers and employers. We noted that the documentation was inconsistent in quality and completeness and did not provide counsellors with sufficient knowledge about clients. For example, some job seekers' files did not provide data on their work histories. The large number of interviews that counsellors must conduct prevents them from putting enough emphasis on information gathering and following up on missing information.

8.111 The limited information in clients' files makes it more difficult to provide quality referrals by matching vacancies with the best qualified clients and to measure the outcome of the services delivered.

8.112 CEIC should develop directives to ensure that documentation in client files is complete and up to date to permit the most appropriate job matches.

Management's comments: EIC is now introducing a new type of interview in its CECs. It will facilitate the identification of worker clients requiring special assistance and, therefore, more complete documentation. For employer clients, an improved manual record file is being introduced immediately; later a computerized file will be available. Better job matches will result from both initiatives.

8.113 The lack of uniformity regarding data currently collected on placement and counselling services makes it impossible to measure performance and assess the quality of services provided to clients on a national basis. Managers have only limited information for resource allocation and control and service improvement. CEIC seems to attach more importance to the placement and counselling processes than to their results. The number of placements and counselling interviews is monitored; however, the cost and quality of service are not measured. In addition, the Commission does not use national standards to measure the performance of employment counsellors.

8.114 The Commission should use time and quality standards to measure the performance of counsellors and assess the quality of service provided to clients.

Management's comments: Time standards have recently been developed for most of the placement and counselling activities and the standards are now being introduced nationally. A system of measuring individual assistance effectiveness, soon to be implemented, will provide information required for sound management decisions on services to worker clients.

Management Controls and Support Functions

Personnel

8.115 In 1982-83, the Commission forecast 625 person-years for its Personnel Services. The estimates for wages and salaries for the whole of CEIC were \$588 million.

8.116 Personnel functions are highly decentralized – personnel management at National Headquarters has functional authority for all activities related to human resource management. There are personnel specialists both at National Headquarters and in each of the 10 regions. Approximately 60 per cent of these specialists are in the regions, and the remaining 40 per cent are at National Headquarters. At the regional level, all personnel managers are directly responsible to a regional executive director or director general.

8.117 The current economic situation with its high rate of unemployment has had a significant impact on the management of human resources in CEIC. Although the rate of employee turnover has slowed within CEIC in 1982-83, the Unemployment Insurance workload increased considerably while placement activities decreased. This required managers to hire approximately 3,000 additional personnel and to reorganize the tasks of Insurance sector personnel.

8.118 In the past two years, CEIC personnel functions have been the subject of many audits conducted by central agencies. There have been audits of classification and staffing, performance review and employee appraisal and management of overtime. These studies have brought about noticeable improvements in the management of human resources in the Commission. However, this audit and those previously conducted have revealed that Corporate Personnel Services has experienced difficulties in fulfilling its role of functional direction.

8.119 Our audit of human resource management was conducted at the National Headquarters and in four of the regions. We focused our review on human resource planning and on training.

8.120 **Human resource planning.** At National Headquarters and in some regions, management placed emphasis on the human resource planning function and showed its commitment by setting up human resource committees in the autumn of 1982. Nevertheless, there were varying degrees of expertise and time devoted to this function within CEIC. Consequently, in some regions, fairly comprehensive planning processes are in place for human resources, while at National Headquarters and in other regions processes are inadequate to meet organizational goals effectively.

8.121 In CEIC as a whole, human resource planning is not seen as a component of the other planning activities. It is therefore not sufficiently linked to strategic, operational and financial planning. We also noted that there is little contact between national and regional

planning and analysis groups regarding human resource issues. Without an integrated human resource planning process, CEIC cannot ensure that it is making the most effective use of its thousands of employees.

8.122 The Commission does not specify its long-term human resource requirements in a comprehensive or systematic fashion. It makes no detailed quantitative forecasts beyond one year and does not identify the types of human resources needed for the long term. The Commission cannot be sure that it has the appropriate human resources necessary for efficient and effective implementation of changes expected in the organization or changes that might have to be made because of the shifting economic situation.

8.123 At present, the Commission has limited information on its existing human resources – information that is needed for planning purposes. The various personnel management information systems do not include sufficient information on the makeup of the organization's work force (experience, type of position, education, mobility, etc.). Planning is restricted by the limited information on the composition, capabilities and aspirations of personnel.

8.124 The Commission has begun a project to improve its personnel information system to meet the needs of human resource planning. This system is to be operational by 1985.

8.125 The Commission should:

- develop a comprehensive, uniform and coherent human resource planning process, linking strategic, operational and financial planning with the personnel function; and
- identify future personnel requirements in qualitative and quantitative terms and ensure co-ordination between national and regional planning functions.

Management's comments: EIC will build on the linkages which already exist and extend the planning period, where feasible. A Career Planning and Review System has been approved by senior management for implementation in EIC in the 1984 appraisal cycle. This system will match upcoming organization needs and individual needs and identify gaps between the two.

8.126 **Training.** The Commission has appointed a co-ordinator responsible for reporting on the training function to Treasury Board Secretariat (TBS) and to CEIC management. However, the co-ordinator does not have the information required to perform this role adequately. Although National Headquarters identifies annually the projected training activities throughout CEIC for reporting to TBS, there is no ongoing requirement for those responsible for training activities to advise the training co-ordinator about new activities as they arise. In addition, National Headquarters does not monitor the extent to

which regions evaluate their training activities or the results of the evaluations. As a result, the training co-ordinator is not in a position to advise regions on the status of training activities in other regions or to report to management on the training methods used in CEIC.

8.127 We found a duplication of effort in the development of training programs and materials. Many responsibility centres and different levels in the organization develop their own training programs and materials. National Headquarters has not centralized the gathering and dissemination of training programs developed throughout the organization that could be common to more than one region. An example is the number of different performance evaluation courses which are given in most regions. National Headquarters did not supply a basic model to help the regions to develop these courses. As a result of this duplication of effort, training costs are higher and there is a lack of standardization in the information given to employees on subjects of national importance.

8.128 National Headquarters should:

- require training personnel in both National Headquarters and the regions to supply information to the training co-ordinator to enable him to carry out his responsibility for co-ordinating and reporting on training activities;
- ensure that all officers responsible for employee training are informed about available courses and materials throughout the Commission; and
- clarify the mandate of headquarters training groups with regard to their role in supporting regional training needs; for example, through developing training material and model training programs.

Management's comments: The establishment and role of the national co-ordinator of training was approved at the September meeting of the Human Resources Committee. EIC has now available a national catalogue of training courses. Modification to the information process through the introduction of the Regional Personnel Services System will make it easier for trainers and responsibility centre managers to have immediate access to the training data. EIC will also clarify and reinforce the respective roles of NHQ and Regions in the revised training policy under development.

Systems and Procedures Group

8.129 The Systems and Procedures group provides support services in the areas of information systems and electronic data processing (EDP), that are necessary for administering the activities and programs of the Department and the Commission.



The scope of CEIC's programs has required development and implementation of many operational computer systems

8.130 The main responsibilities of this group are to develop, implement and maintain computer systems for use in national programs; to develop and administer policies and plans for EDP and related manual systems; to supply consulting services of a general management nature; and to provide form design services. The group is also responsible for operating the data centre in Hull.

8.131 Data processing is decentralized in 10 data centres. The regional data centres report administratively to the region in which they are located. However, National Headquarters has functional responsibility for these centres.

8.132 Most of the current systems use batch processing. However, the majority of systems now being developed will be on-line, and some will be supported by data bases. Data processing within the Department and the Commission is not restricted to conventional financial and administrative information. The wide scope of CEIC's programs has required the development and implementation of many operational computer systems, and these systems have become essential to the successful operation of the programs they support.

8.133 For the fiscal period 1982-83, the Commission's budget for data processing was approximately \$60 million, of which \$20 million was for the Systems and Procedures group. Data processing uses 930 person-years, of which 400 are at National Headquarters and 530 are in the regional computer centres.

8.134 We examined the management procedures and methods used by the Systems and Procedures group to direct and administer all its activities. These include planning new computer applications, utilizing resources, both human and material, and developing and implementing systems as required.

8.135 We reviewed the EDP Policy Standards and Procedures Manual, the planning process and plans that result from the process, and a sample of seven systems being developed or maintained. We examined, where appropriate, the organization, planning and control mechanisms and the methods used to plan, develop, implement and evaluate after implementation.

8.136 The Commission has computerized almost all systems for its programs. The Unemployment Insurance program has the highest profile; the Systems and Procedures group is responsible for developing and modifying the EDP systems relating to this program. The group carries out these responsibilities well; in our previous studies on errors in insurance benefits paid, we found that the systems complied faithfully with the acts and regulations.

8.137 **Direction and management.** In the complex and dynamic environment in which the Commission operates, it is essential that policies, standards and procedures are developed, kept up to date and followed.

8.138 The EDP Policy Standards and Procedures Manual issued in February 1980 has not been revised since June 1980. Many directives and standards are very general, such as those relating to the planning process and to the organization and control of projects. As well, the manual does not mention the development of data bases or on-line systems. As a result, the quality and relevance of the work done depend, to a great extent, on the experience of EDP personnel.

8.139 The personnel assigned to planning and developing projects do not always follow the standards and directives specified.

8.140 The Systems and Procedures group should up-date its EDP Policy Standards and Procedures Manual. There should also be a procedure in place to ensure compliance with the Manual.

Management's comments: The EDP Policy Standards and Procedures Manual was issued in 1980 and updated once since. Another update will be undertaken shortly. With the updating of the Standards Manual, enforcement of standards by managers will be given increased emphasis.

8.141 **Planning for EDP.** Our audit revealed that the EDP planning process was not well defined or communicated throughout the Commission. The information needs and

projects of users that have an impact on data processing were not identified in a systematic, regular and formal manner. It was difficult to establish links between existing data processing plans – the operating plan, the multi-year plan and the plan submitted to Treasury Board. The long-range EDP plan was poorly defined and documented; further, it did not integrate and co-ordinate all the elements or resources such as projects, materiel, personnel and organizational structure. The operational plan contains few qualitative or quantitative elements relating to projects or activities for the coming year.

8.142 Consequently, the EDP planning process provides a limited amount of useful material for determining whether EDP projects and activities will meet the Commission's short and long-term goals, whether human and financial resources are adequate, and whether the performance of the Systems and Procedures group is satisfactory.

8.143 The Systems and Procedures group should specify and document its EDP planning process and integrate it with the Commission's. It should also specify the contents of EDP plans and ensure that they are integrated with one another and are complete.

Management's comments: EIC complies with planning requirements, as directed by Treasury Board, through the Annual Information Technology and Systems Plan. In addition to individual project plans developed and presented to Project Steering Committees, the Senior Steering Committee on Systems and Procedures, and Treasury Board, annual work plans are submitted with the budget. As of 1983-84, these work plans are formalized through CEIC Management Contracts with the Deputy Minister. This newly implemented process will provide a mechanism for integrating and linking the various plans.

8.144 **Organizing and managing projects.** The EDP Policy Standards and Procedures Manual defines the development and administration process for projects in a general way. As a rule, the work plans we examined did not show, or showed only some of, the following information about projects: the anticipated date of termination of activities; the persons responsible for planned activities; the estimated time and cost; and the qualitative and quantitative results anticipated.

8.145 As well, the control reports we examined did not set out systematically and regularly the resources and time actually spent on the project, the corresponding budgeted cost and time for the various activities, and the activities planned but not carried out.

8.146 As a result, the Commission's senior management has little integrated information for evaluating project plans, ongoing projects and the performance of project teams.

8.147 The Systems and Procedures group should define and document in greater detail the process required for detailed planning of projects and the controlling and reporting processes.

Management's comments: In recognition of the growing complexity of the systems effort in EIC, a new system of project authorization was implemented April 1, 1983. The recent establishment of the Senior Steering Committee on Systems and Procedures chaired by the Associate Deputy Minister/Vice-Chairman will ensure that senior management has adequate information for planning, controlling and assessing EDP processes.

8.148 **Evaluation of EDP systems after installation.** According to our criteria, evaluations of EDP systems – of differing importance and frequency depending on the system – are necessary to determine:

- the human and material resources used in developing and implementing the system, to enable a comparison to be made between resources used and those budgeted; and
- whether the system satisfies – and continues to satisfy – the processing and information needs of the users from the point of view of time frames, benefits, costs and other considerations.

8.149 For EDP systems that are to be designed, evaluations of prior installations would provide information that would allow for plans to be modified or for the development and costing process to be adjusted. They would also provide information for modifying existing systems or operating methods.

8.150 We found that the Systems and Procedures group had done a partial evaluation of some EDP systems after they had been developed and implemented.

8.151 The Systems and Procedures group should ensure that all major EDP systems are evaluated after installation and periodically thereafter.

Management's comments: In the past few years, major systems have been assessed by independent consultants as well as our internal Planning and Analysis branch and our Strategic Policy and Planning group. As resources are available, more post-implementation review will be conducted.

8.152 **Planning for the recovery of processing capability.** At the time of our audit, the policies, directives and procedures for recovery of processing in case of extended interruptions of service in data processing centres were either incomplete or outdated. Such policies should cover organizing, planning and administering contingency processing activities in case of equipment failure, sabotage or natural disasters. Their absence could delay program delivery unnecessarily or result in a lack of economy.

8.153 The Systems and Procedures group should specify and communicate policies, directives and procedures for organizing, planning and administering contingency processing activities.

Management's comments: Contingency policies, plans and procedures exist for critical batch processing systems and were last updated in July 1982. Sufficient equipment exists currently to back up all batch processing systems. A detailed study is presently under way with respect to equipment requirements to back up the on-line system. This study is expected to be completed in early fall 1983.

Employment and Immigration Information System

8.154 The Commission has a variety of systems to fulfil its information requirements; the most important of these is the Employment and Immigration Information System (EIIS). This system was produced by integrating the information systems used by the Department of Manpower and Immigration with those of the Unemployment Insurance Commission.

8.155 The objective of EIIS is to satisfy the organization's needs for information on its programs, operations and resources. It is a computerized modular system which gathers various data, produces reports and supplies information to users at all levels of the organization. EIIS produces reports using financial data, data on personnel and data on the operations of the Commission.

8.156 We divided EIIS users into two types: operational users and management users. Operational users are those who work with the system; for example, the finance group, which uses information produced by the "non-salary" expenditure module. Management users control their responsibility centres using EIIS reports.

8.157 Our audit concentrated on the quality of EIIS and its information. As well, we reviewed the use made of the system by sampling different organizational levels and locations in the Commission. We found that, as a rule, the system meets the needs of operational users better than those of management users.

8.158 Data are being entered in duplicate and triplicate. For example, information on documents for the personnel module is coded and entered for EIIS and for the Department of Supply and Services (DSS). Information from other documents is also coded and entered for the Personnel Management Information System. Information for the "non-salary" expenditure module is coded for EIIS and DSS and then entered twice, once for DSS and a second time for EIIS. Efforts are already being made to eliminate this duplication and to achieve greater integration of systems.

8.159 EIIS has been the subject of complaints, especially from management users, with regard to its lack of accuracy and the lack of timeliness of its reports for controlling daily operations. However, our audit showed that EIIS accurately processes the data it

receives. To resolve the daily control problem, CEIC will need to use new EDP techniques. In this context, it is currently upgrading certain parts of EIIS through the use of on-line enquiry techniques. However, the development of such a complex system requires substantial amounts of resources and time. For example, the Regional Personnel Support system will not be operational before 1985.

8.160 Volume reports contain so much information that managers need to have it summarized manually before they can use it in the decision-making process.

8.161 The Commission should:

- consider integrating the data entry process so there is only one coding and data capture operation;
- where cost-justified, take advantage of technology improvements; and
- undertake a study of the needs of volume report users to determine a more useful form for these reports.

Management's comments:

- *Action has already been taken to eliminate duplicate coding of all non-salary expenditure transactions. The development of an on-line personnel system (RPSS) will address the elimination of duplicating coding and data capture for all salary transactions. Remote input/output terminals will be installed in the current year to speed up the Non-Salary Module processing, and tape transfer between EIIS and Supply and Services Canada is being pilot-tested.*
- *As to user needs, they are communicated either as a result of the use made of the system or through feedback at training courses being given on the use of the Volumes Module. Various enhancements have been specified and are planned for the current year.*

Performance Measurement

8.162 The Executive Director, Finance and Administration, supported by the Performance Measurement Steering Committee (PMSC), is responsible for co-ordinating performance measurement in CEIC. The PMSC is made up of representatives from the regions and various functional sectors at National Headquarters. It is responsible for providing guidance on formulating and co-ordinating performance measurement and promoting its use in the Commission. National and regional task forces provide additional support.

8.163 Our audit covered mainly the systems and information used by the Commission to measure and control efficiency. It was conducted at National Headquarters and in two

regions, Quebec and Ontario, which have the largest number of human resources – a total of 14,600 person-years. We visited three CECs in each of these provinces, in addition to the regional offices.

8.164 We assessed national policies on efficiency and productivity and their implementation in both regions. We also conducted tests on the reliability of operational data in five of the six CECs visited in Ontario and Quebec. In addition, we reviewed CEC time and production reports and considered whether engineered standards could be used to determine efficiency levels within CECs.

8.165 Accuracy and reliability of performance indicators. National Headquarters performance measurement policy clearly assigns responsibility for controlling input data reliability to the regions. CEC managers and supervisors collect and report time and production data. These operational data and the reports produced are used to monitor and control work backlogs and productivity levels. In Ontario and Quebec, procedures relating to performance data accuracy – that is, for the data collection process, reliability monitoring and follow-up procedures for each CEC – have not been adequately specified and followed.

8.166 As a result, performance data accuracy is not being regularly and systematically checked, and the degree of reliability of performance indicators is unknown.

8.167 National Headquarters should ensure that regions develop procedures to establish performance data reliability.

Management's comments: EIC has undertaken a quarterly monitoring of data integrity with a follow-up conducted in each region. A data integrity liaison mechanism is now in place when program managers detect questionable data. These efforts will continue.

8.168 Use of performance indicators and of engineered standards. The Commission's policies on the use of performance indicators are too general to guide managers. Moreover, the regions did not appear to be well informed about the role of performance indicators at the national level.

8.169 Engineered standards have been developed by National Headquarters for 62 per cent of the person-years amenable to work measurement, or approximately 10,000 person-years. These standards have been applied at the national level to assess the impact of procedural changes and to determine resource requirements to meet rapidly increasing demands for service. They have not been used in the CECs to measure and report on efficiency.

8.170 Based on a review of data and reports covering 18 operational units in 3 CECs in Ontario, we found that:

- productivity levels were not compared to standards in the production reports;
- production items reported related closely to the national engineered standards;
- reports generally indicated daily activity and were not accumulated on a weekly or monthly basis;
- reports covering previous months had not been retained; and
- reports provided an inadequate indication of productive time used to process work; in many cases, productive time used was not indicated in these reports.

8.171 Because this information was lacking, it would have been feasible to apply the Commission's engineered standards to calculate efficiency levels in only 4 of the 18 operational units we reviewed. In addition, the module for applying standards through the EIIS was not fully operational and still needed refinement. Consequently, efficiency was not being measured by the system.

8.172 In our opinion, reports could readily be modified to permit the application of the Commission's standards. Applying the standards would improve the usefulness of these reports, both for day-to-day efficiency controls and for productivity improvement.

8.173 The Commission should modify the Employment and Immigration Information System so that managers can make greater use of its engineered standards, particularly as a means of measuring, controlling and improving efficiency in CECs.

Management's comments: The EIIS improvements requested are currently available using the EIIS Management Reports Module. Further refinements to these reports are also planned for the current year.

Program Evaluation

8.174 Responsibilities of the Program Evaluation Branch of the Strategic Policy and Planning group include measuring the effectiveness of the Commission's programs. The mandate and responsibilities of the evaluation function are governed by the Department's policy on program evaluation.

8.175 Our audit examined the program evaluation studies which had been done, as well as the management and organization of the evaluation function.

8.176 The Department of Employment and Immigration is one of the most experienced in the field of program evaluation. An analysis of the studies carried out shows that quality has improved considerably during the past few years. Among other improvements, the Department now uses more appropriate and diversified methods and more complete data bases. The result is more complete and better quality information on program effectiveness.

8.177 With respect to management and organization of the evaluation function, we noted that annual plans for evaluation were not followed. According to the Department, these plans were unrealistic partly because of the presence of supernumerary staff due to the 1977 integration. At 31 March 1983, this prevented the staffing of seven positions, or 20 per cent of the professional evaluation staff. We also noted that the execution of evaluation projects had not been adequately controlled in the past.

8.178 We found examples of evaluation studies being used; for example, the study on the Canada Manpower Industrial Training Program was reflected in the modification of the Adult Occupational Training Act. Nevertheless, the Department did not have appropriate procedures for monitoring implementation of the recommendations made as a result of evaluation studies.

8.179 Since January 1983, the Department has taken steps to rectify these shortcomings in its program evaluation activities.

8.180 **Effectiveness indicators.** There are few effectiveness indicators relating to CEIC's long-term objectives. This makes it difficult for the Commission to evaluate the achievement of its objectives.

8.181 The Department's approach emphasizes integrating effectiveness indicators developed during evaluation studies with strategic plans. We observed that, for evaluating client training programs, the Commission had developed and applied indicators relating to the employment prospects and earning potential of people who had taken training courses. It had also implemented an information system to identify professions where demand exceeds supply. For Employment Services, quality indicators could be developed for placements made through CECs.

Internal Audit

8.182 The Internal Audit Bureau has a staff of approximately 70. Its authorized budget for 1982-83 was \$5.6 million, including fees for contract staff. Since our 1978 Report and the IMPAC study by the Office of the Comptroller General, improvements have been made in internal audit. However, the function did not meet all our criteria for the planning, human resources and reporting aspects of internal audit.

8.183 Planning. We did not find, in either the long-range or the annual audit plan, specific factors of materiality and risk used to determine the order and category of priority of each audit area. As a result, some of the more important and significant audit areas or projects may not be examined because of a lack of human or monetary resources.

8.184 The Internal Audit Bureau should document clearly, in its long-term and annual plans, how elements of materiality and risk are used to determine the order of priority for audit areas or projects.

Management's comments: EIC will address this issue in the long-range and annual plans to be completed during 1983-84 by the Internal Audit Bureau.

8.185 Human resources. The need for human resources is summarized in the long-range plan in person-weeks only. The annual plans for 1983-84 break down the person-weeks between operational staff and auditors. There is no summary of the mixture of resources required, in respect to level of competence, experience and specialities, to execute the plan.

8.186 Since Internal Audit does not have a well established staffing plan, there is no guarantee that all human resource needs in terms of numbers and the mix of qualifications will be met.

8.187 As a result, there is a risk that the staff assigned to an audit project by the Internal Audit Bureau may not possess the skills required, and the Bureau may not be able to obtain the mix of competence, experience and specialities necessary to carry out its mandate.

8.188 The Internal Audit Bureau should identify its personnel needs in terms of level of competence, experience and specialities. Before hiring people to complete its staff requirements, the Bureau should prepare a staffing plan which clearly responds to its needs.

Management's comments: EIC has a staffing plan for 1983-84 which reflects its personnel requirements according to levels of expertise and experience, while making due provision for specialization and the need for flexibility in order to respond and react to changing circumstances and conditions.

8.189 Reports. Our review of internal audit reports revealed that the Bureau has not established standards for the format and content of audit reports. Reports would be much more useful to senior management if they contained a summary of important points and were sent to managers responsible for taking corrective measures.

8.190 The Internal Audit Bureau should develop guidelines for the format, content and distribution of its audit reports.

Management's comments: EIC will develop a policy during 1983-84 covering format, content and distribution of audit reports.

Information for Parliament

8.191 The Commission followed Treasury Board's directive in setting out its Expenditure Plan in Part III of the Estimates for 1983-84. This new presentation aims at improving accountability of government to Parliament by providing more detailed and pertinent information on programs to give Members of Parliament a better chance to scrutinize expenditures.

8.192 We examined this document, which was the first the Commission had presented, and believe it represents a significant improvement over the information previously reported to Parliament. The Commission indicated that other areas and information will be added, including counselling interviews and labour market development initiatives. In the preceding sections of this chapter, we pointed out weaknesses in the planning process as well as the fact that performance indicators are not applied on a national scale. Improvements in these areas will allow the Commission to supply more meaningful information to Parliament.

8.193 Part III of the Estimates for 1983-84 for Employment and Immigration Canada does not give information on the revenues of the Unemployment Insurance Account. Without this revenue information, parliamentarians cannot be informed of the financing of the Account on a multi-year basis. To remain within the spirit of the Treasury Board policy, the Commission should have included in its expenditure plan sufficient information to allow Members of Parliament to understand and appraise the operations of the Unemployment Insurance Account, one of the main socio-economic programs CEIC administers. The availability of such information is indicated by the fact that the Minister of Finance included the five-year financial forecast for the Unemployment Insurance Account in the 19 April 1983 Budget.

8.194 Nevertheless, we would like to draw Parliament's attention to the extent of the deficit of the Unemployment Insurance Account at 31 December 1982. The economic situation is the principal cause of the high rate of unemployment and benefits paid. This has resulted in an unprecedented deficit in the Unemployment Insurance Account of \$2.4 billion. Exhibit 8.4 gives the operating figures for Unemployment Insurance in recent years.

8.195 According to the forecast for the years 1983 to 1987 presented by the Minister of Finance in the 19 April 1983 Budget, the accumulated deficit of the Account will be \$4.2 billion at the end of 1984. After this date, the deficit is forecast to decrease gradually in 1985, 1986 and 1987 and be eliminated at the end of 1987.

8.196 These economic projections are tentative and are only approximations, especially for the medium term (1985 to 1987). The forecasts for the Account in the Budget are based on a maximum unemployment rate of 12.4 per cent in 1983, to be reduced gradually to 8.8 per cent in 1987. As well, the Budget assumes that the employee's share of premiums will remain at \$2.30 for every \$100 of insurable earnings in 1983 and 1984. The premiums will increase to \$2.40 in 1985 and \$2.65 in 1986, and decrease to \$2.20 in 1987.

8.197 If the actual annual deficits were higher than forecast, the Government would have to select one or more of the following options for eliminating them: increase employer or employee premiums or both; decrease the benefits paid to claimants; increase the government's share of expenses; or amend the method of financing the Unemployment Insurance Account.

**DEPARTMENT OF ENERGY, MINES AND RESOURCES
ENERGY PROGRAM**

DEPARTMENT OF ENERGY, MINES AND RESOURCES

ENERGY PROGRAM

Table of Contents

	Paragraph	Page
SYNOPSIS	9.1	287
Audit Scope	9.25	293
Conservation, Renewable Energy and Oil Substitution Programs	9.28	293
Canada Oil Substitution Program	9.38	297
Canadian Home Insulation Program	9.40	297
Distribution System Expansion Program	9.49	299
Forest Industry Renewable Energy	9.54	300
Conservation and Renewable Energy Demonstration Agreements	9.59	301
Atlantic Energy Conservation Investment Program	9.66	302
Industrial Conversion Assistance Program	9.68	303
Canada – Nova Scotia Subsidiary Agreement on Energy Conservation	9.70	303
National Energy Audit Program	9.72	304
Federal Internal Energy Management Programs	9.74	304
Propane Vehicle Grant Program	9.81	305
Compressed Natural Gas Demonstration Program	9.83	305
Summary Conclusions	9.86	306
Conservation and Non-Petroleum Sector Management Controls	9.90	307
The Office and Panel on Energy Research and Development	9.102	309
Petroleum Incentives Administration	9.115	313
Oil Pricing and Compensation Programs Branch	9.145	319
Administration	9.157	322
Authority Issues	9.181	326
Canadian Ownership Account	9.191	328

		Page
Exhibits		
9.1	Organization Chart Indicating Areas of Audit Scope	292
9.2	Programs in the Conservation, Renewable Energy and Oil Substitution Areas	294
9.3	Growth of Panel Funding for Energy Research and Development, 1974-75 to 1987-88	309
9.4	Energy R & D Committee and Review Structure	310
9.5	The Canada Lands	314

DEPARTMENT OF ENERGY, MINES AND RESOURCES

ENERGY PROGRAM

SYNOPSIS

EMR Background

9.1 Through the 1970s, the Energy Sector of the Department of Energy, Mines and Resources was almost exclusively involved in the provision of advice to ministers on energy issues. Program delivery in energy was not a major function of departmental management, as there were few programs being delivered.

9.2 With the 1980 National Energy Program (NEP), the Energy Sector was transformed. It was no longer a policy advisory organization with minor program delivery responsibilities. It became a delivery agent for many complex and diverse programs; at the same time the importance and difficulty of its policy advisory function increased greatly. Operational considerations began to affect policy, and the need to adapt policies to suit operational reality became urgent. At the same time, managers in the Energy Sector either had to learn the skills needed for successful program implementation or they had to be recruited – all of this in a very short period of time. The authorized person-years grew from about 370 to 1,380 from 1980 to 1983.

9.3 The precepts for the program were stated as follows:

It must establish the basis for Canadians to seize control of their own energy future through *security* of supply and ultimate independence from the world oil market.

It must offer to Canadians, all Canadians, the real *opportunity* to participate in the energy industry in general and the petroleum industry in particular, and to share in the benefits of industry expansion.

It must establish a petroleum pricing and revenue-sharing regime that recognizes the requirement of *fairness* to all Canadians no matter where they live.

9.4 The NEP is made up of a collection of programs where some are large and others small; some simple, others complex; some enter new areas; others expand old. For example, the Petroleum Incentives Program pays about \$1.8 billion per year to a few hundred generally sophisticated participants in oil exploration activities. The Canadian Home Insulation Program (CHIP) and the Canada Oil Substitution Program (COSP) together paid out \$377 million last year to over 700,000 people involved in conservation

activities in their homes. Public institutions and private corporations are the recipients of other programs; some programs are in the form of federal-provincial agreements; others are designed to help remote communities reduce fuel costs. Some involve basic research, others demonstrations of known technologies. This heterogeneity on several dimensions creates many management problems.

9.5 While these programs were being implemented, the world energy environment was changing rapidly, and federal-provincial negotiations in energy were being conducted. The world prices for crude oil stopped rising; the effects of conservation efforts were greater than anticipated; the world economy slowed; and the demand for oil dropped. These influences demanded attention of program personnel.

9.6 In summary, the implementation of the National Energy Program was a large and difficult task done under rapidly changing circumstances and very strong time pressures.

9.7 We believe that the programs have been well implemented, considering the circumstances. Further improvement in procedures is needed and much is under way. We did not attempt to assess the value of any program or whether it had been successful in meeting its objectives.

Conservation, Renewable Energy and Oil Substitution Programs

9.8 There are about 40 such programs that were either introduced or expanded by the National Energy Program. They disbursed over \$500 million in 1982-83; the largest are the Canadian Home Insulation Program (\$224 million in 1982-83) and the Canada Oil Substitution Program (\$153 million in 1982-83). In our view, the challenge presented by the NEP to public servants at all levels was great. Overall, the challenge of implementation is being met.

9.9 With one exception, all the programs we audited are now well administered in the sense that applications are reviewed and approved, and payments are made under appropriate controls. However, ongoing monitoring of program procedures, effects and impacts needs further improvement. Some programs were well implemented but, in others, key functions were not well performed. For example, monitoring of procedures, impacts, and markets affected was not done in some programs; corrective or adaptive action was not prompt or appropriate in others; the links between the policy-setting level and the program operating level were sometimes weak. These omissions have resulted in allowing inappropriate program constraints or operational problems to persist. A lack of standard on the key functions required to manage program implementation appears to have been a contributing factor in some of these deficiencies.

9.10 In some situations, insufficient personnel resources were assigned to do the work needed to implement programs properly. For example, in 1978, only one person was

assigned for the first two years to design, start up and operate a program intended to disburse more than \$100 million over a five-year period. We consider it an important responsibility of management to assign the personnel resources needed during the life of a program to ensure economy, efficiency and effectiveness in program delivery. This has not always been done.

The Office and Panel on Energy Research and Development

9.11 The Office on Energy Research and Development (OERD) was created in 1974 to support a Panel of senior public servants responsible for energy R&D in various departments. The Panel role is to develop, implement, review and co-ordinate federal energy R&D, including advising the Treasury Board on allocations to departments of energy R&D funds. Panel-controlled funds amounted to \$163 million for 1983-84. Departments and agencies make proposals for the use of energy R&D funds. The Panel has a complex committee review system to help develop its recommendations for projects to support.

9.12 The planning and co-ordination processes were generally satisfactory. However, we noted that all federal funds spent on energy R&D are not explicitly considered in the Panel's deliberations. In 1982-83, the Panel controlled \$123 million; other expenditures on energy science and technology, excluding those of AECL, amounted to \$134 million. Selecting and monitoring R&D projects, although sometimes informal, are done satisfactorily. The review and assessment processes were insufficiently developed to ensure comprehensive and independent reviews of R&D activities.

9.13 We believe that the OERD needs to increase the role of outside experts in reviewing and assessing energy R&D programs and needs to develop more formal selection procedures. It also needs to ensure that all federal expenditures on energy science and technology are explicitly considered in the Panel's deliberations.

Petroleum Incentives Administration

9.14 The Petroleum Incentive Administration (PIA) was created in July 1982 as a merger of two previously separate organizations. By April 1985, payments of \$4.6 billion in exploration and development incentives are expected to be made to the oil and gas industry. The Administration's activities are designed to contribute to the security of supply and Canadian participation objectives of the NEP and, for this purpose, PIA makes incentive payments to eligible applicants. PIA determines the Canadian ownership rate and whether an applicant is Canadian controlled. The level of incentive payments depends both on control status and the degree of Canadian ownership. A foreign-controlled applicant can obtain reimbursement for only 25 per cent of its eligible costs; a Canadian-controlled and owned applicant can receive up to 80 per cent reimbursement. Payments are to be made only to eligible applicants for eligible expenses. The demand for PIP contributions is open ended, and we believe the potential demand pattern and magnitude will need to be closely watched and controlled. A key program function involves using the regulatory framework to adapt the eligibility criteria to a changing environment and to make adjustments to suit

particular situations. To do this, the legislation, regulations and operating procedures are amended periodically.

9.15 We examined the program's administrative processes and operating systems, and the procedures for managing its regulatory control framework both from a systems viewpoint and from a study of the applications of regulations and discretionary decisions in particular cases.

9.16 PIA is well administered overall, but some key management functions are not yet adequately performed. Program design was based on extensive consultation with the industry, and key factors in the operating environment were considered. Operating and delivery systems are in place and are consistent with good management practices. However, short-term monitoring of the program environment and program performance, and the framework for program effectiveness are not adequately developed. Key assumptions on which the program design is based have not been adequately assessed in light of experience gained thus far.

Oil Pricing and Compensation Programs Branch

9.17 This program, established in 1974, is designed to achieve a uniform price for crude oil in Canada. It does this by paying compensation to importers of crude oil so their effective price is the same as that of purchasers of domestic crude oil. As an incentive for domestic exploration and production, world prices are paid for certain categories of domestic and synthetic crude oils; the program administers the associated payments. Revenues to make the program payments are obtained from all Canadian users of crude oil. They pay a Petroleum Compensation Charge that totalled \$3.031 billion in 1982-83. Program expenditures were \$2.996 billion in the same period. The program is administered by the Oil Pricing and Compensation Programs Branch. We examined the Petroleum Compensation Charge processes for forecasting, rate setting and revenue collection. We also examined the processes for setting payment rates, making payments and post-payment audit.

9.18 Overall, the Branch manages its programs well. It has ensured that payments and revenues have been properly administered in the fiscal year ending 31 March 1983.

Administration

9.19 Our audit also considered payroll costs management, financial management and control, and authorities. Observations and recommendations are directed toward establishing improved systems and controls now that the urgency of the start up of the NEP is fading.

Canadian Ownership Account

9.20 The revenues from the Petroleum and Petroleum Products Tax and the Gas and Gas Liquids Tax are to be used solely to finance an increase in public ownership in the energy industry. The revenues and expenditures are recorded in the Canadian Ownership Account (COA). In 1982-83, expenditure of \$898 million was made to Petro Canada to finance its 1981 purchase of Petrofina Canada Inc.

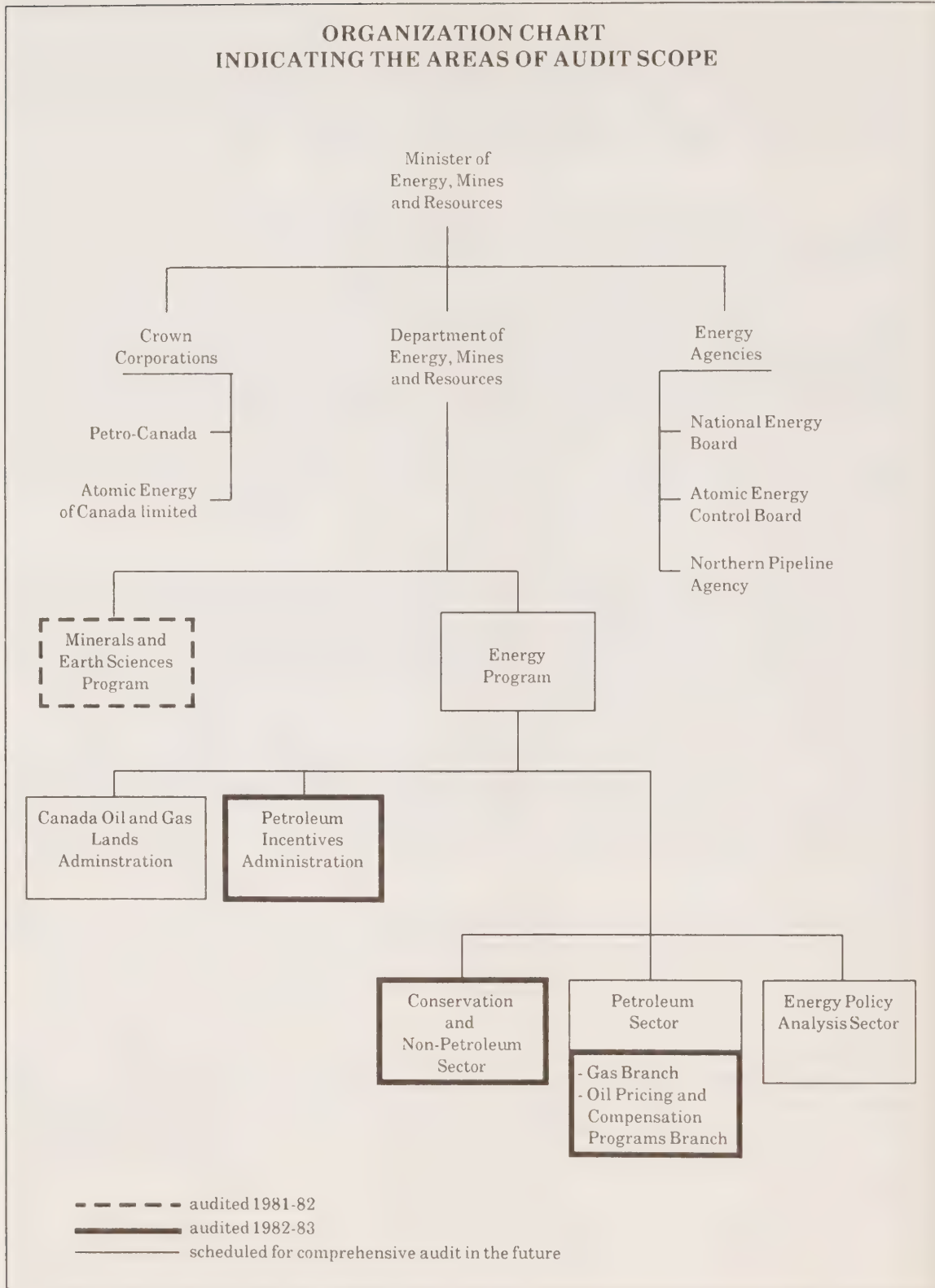
9.21 The COA is also committed to accumulating \$500 million for a financing offer to Dome Petroleum.

9.22 In our 1982 Report, we stated that there is "a serious weakness in the management of public funds when departmental and central agency officials have had no responsibility to ensure due regard to economy is demonstrated and value for money achieved." During the past year, we requested pre and post-acquisition evaluations done or being done by Petro-Canada of the Petrofina assets acquired by Petro-Canada. As of 15 September 1983, the evaluations had not been received. We are still unable to determine whether due regard for economy was demonstrated and value for money achieved in the \$1.7 billion purchase of Petrofina Canada Inc.

9.23 The sale of Petrofina Canada Inc. to Petro-Canada was structured in such a way that foreign owners would not have to pay capital gains tax. We have been unable to ascertain whether this benefit, amounting to hundreds of millions of dollars and not available to the Canadian co-owners, was duly considered in determining the purchase price for Petrofina shares.

9.24 Petro-Canada had arranged for bridge financing in its purchase of Petrofina Canada Inc. Even though the interest costs are being paid from the Canadian Ownership Account and are not recognized as an expense by Petro-Canada, Petro-Canada has nevertheless used them to reduce its tax liability, resulting in a financial gain of \$60.7 million to Petro-Canada.

ORGANIZATION CHART INDICATING THE AREAS OF AUDIT SCOPE



Audit Scope

9.25 Each year, an audit of the accounts of the Department of Energy, Mines and Resources is undertaken and reported on as an integral part of our audit of the Public Accounts of Canada. To comply with section 7 of the Auditor General Act, additional audit activity, with an emphasis on due regard to economy and efficiency and the procedures to measure and report the effectiveness of programs, is undertaken on a periodic basis.

9.26 Last year, we audited the Minerals and Earth Sciences Program of the Department of Energy, Mines and Resources. This year, we audited some of the Department's programs in the energy area. We focused on those organizations responsible for program delivery. We did not audit the Energy Policy Analysis Sector or the four branches in the Petroleum Sector which are largely policy advisory groups. In the future, these organizations, the Canada Oil and Gas Lands Administration and the energy agencies will be examined as part of our continuing audit of the Department of Energy, Mines and Resources.

9.27 Exhibit 9.1 is a chart showing both the way that the Department is organized and the organizational entities covered by past, present and future audits.

Conservation, Renewable Energy, and Oil Substitution Programs

Background

9.28 The 1980 National Energy Program (NEP) contained a long list of programs directed to conservation, renewable energy, and oil substitution. Some were new initiatives, some were already established programs, and others were expansions of existing programs. Most of these programs make financial contributions toward the costs of approved projects designed to conserve energy, reduce oil consumption by substituting alternative energy sources, or increase the use of renewable energy sources. Others are designed to promote, encourage and facilitate energy conservation in the private sector of the economy.

9.29 The Conservation and Non-Petroleum Sector (CNP) is responsible for most of these programs; the Gas Branch in the Petroleum Sector has responsibility for several programs designed to increase the use of natural gas as a substitute for oil. The programs in this area are listed in Exhibit 9.2. This shows their number and their heterogeneity. For the CNP Sector, we examined in detail controls over \$450 million of its \$525 million expenditures.

9.30 For the Gas Branch of the Petroleum Sector, we examined the three major expenditure initiatives and the single revenue program. Their dollar value amounted to about \$75 million in 1982-83.

PROGRAMS IN THE CONSERVATION, RENEWABLE ENERGY AND OIL SUBSTITUTION AREAS

	Indication of Size (millions of dollars)	Duration
Petroleum Sector, Gas Branch		
Distribution System Expansion (DSEP)	* 60/year	1981-86
Natural Gas Laterals	* 500	1981-86
Gas Marketing Assistance	* 100	1981-86
Maritimes Engineering	45	1981-86
Market Development Incentive Payments (Revenue up to March 1983)	* 28.5	1981-87
Conservation and Non-Petroleum Sector		
Loss subvention - Coleson Cove	up to 25/year	each year
Oil Substitution for Utilities	175	total
Annapolis Tidal Power	25	completed
Canadian Electric Association R&D	2.1	continuing
Energy Conservation and Oil Substitution Branch		
Accelerated Capital Cost Allowance (Class 34)	<input type="checkbox"/>	continuing
Atlantic Energy Conservation Investment (AECIP)	* 40	1981-86
Canada - N.S. Energy General Demonstration Agreement	* 15	1978-84
Canada - Oil Substitution (COSP)	* 2,044	1981-90
Canadian Home Insulation (CHIP)	* 2,244	1977-86
Commercial Task Force	<input type="checkbox"/>	continuing
Ener\$ave	<input type="checkbox"/>	continuing

☐ Operating costs only

* Audited in detail

(cont'd)

	Indication of Size (millions of dollars)	Duration
Energy Conservation and Oil Substitution Branch (Cont'd)		
Federal Internal Off-Oil	* 25.5	1981-92
Federal Internal Retrofit	* 120	1981-86
Federal Propane Vehicle	* 9.7	1981-86
Industrial Conversion Assistance (ICAP)	* 30	1983-87
Industrial Energy Conservation Task Force	<input type="checkbox"/>	continuing
Industrial Energy Management	<input type="checkbox"/>	continuing
National Energy Audit (NEAP)	* 40	1981-85
Super Energy Efficient Housing	6	1981-85
Coal and Alternate Energy Branch		
Coal Utilization	150	1981-85
Coal R&D	16	1981-86
Federal-Provincial Demos (CREDA)	* 113	1979-84
Forest Industry Renewable Energy (FIRE)	* 288	1977-86
Remote Community Demonstration	24	1981-87
Solar Hot Water Demonstration	4.2	to 1984
Compressed Natural Gas Demonstration	* 1.3	to 1983
Motor Vehicle Fuel Consumption Standards	<input type="checkbox"/>	1987
New Liquid Fuels Research and Development	113	1979-84
Propane Vehicle Grant	* 40	1981-85
Small Projects Fund	1	continuing
<input type="checkbox"/> Operating Costs Only		
* Audited in detail		

9.31 In any program, there is a normal life cycle: policy development, pre-implementation planning, program start-up, ongoing operation and shut-down. The separations between the life-cycle stages are usually fuzzy, but we have assumed that the policy development stage was completed with the publication of the NEP on 28 October 1980. Few of the programs are yet at the shut-down stage, so we focused our audit efforts on the management control of the three middle stages – pre-implementation planning, program start-up, and ongoing operations.

9.32 For pre-implementation planning and program start-up, the general management practices we expected to find are listed below:

- **There should be appropriate pre-implementation planning.**
- **There should be effective links between the policy-setting and the operational levels of the program.**
- **There should be extensive monitoring.**
- **There should be appropriate and timely corrective action taken in light of this monitoring.**

9.33 How these general management practices should manifest themselves in a particular program depends on many special factors, including the purpose of the program; the method and organizational structure chosen; the clientele to be served; the experience, skills, attitudes, motivations and personalities of the people involved; and the time and resources available. An important factor that should always be considered is the time and resources available for planning. But when the time and resources for planning have been limited, the need for monitoring and corrective action becomes greater.

9.34 The management practices we expected to find for an ongoing program are based on those described in the 1981 annual Report of the Auditor General (Annex 2 to Chapter 2, page 65 "Audit Criteria for the Management of R&D Grants and Contribution Programs"). During the audit, we discussed with program managers and staff how special factors should influence these management practices.

9.35 **Audit scope.** We surveyed 35 programs and selected 17 for detailed audit. For the CHIP program, we relied on a major departmental program evaluation done during 1982 and early 1983. Ten of these 17 programs were audited by departmental internal audit personnel, under our direction.

9.36 In the following paragraphs, we report on our audit of the management practices followed in implementing and operating various programs. As stated previously, we did not attempt to assess the value of any program or whether it had been successful in meeting its objectives.

9.37 The conclusions we drew from this audit work are stated in paragraphs 9.86 through 9.89.

9.38 **Canada Oil Substitution Program – COSP.** COSP is an oil substitution and conservation assistance program providing taxable contributions toward the capital costs of converting heating systems from oil to other energy sources, or toward the capital costs of achieving energy savings in buildings. The contributions may be as high as 50 per cent of the eligible costs of such work to a maximum of \$800 for a single unit, and up to \$5,500 for a multiple-unit residential building. In 1982-83, \$153 million was paid out under COSP; the program is to continue until 1991 and cost \$2 billion.

9.39 For the most part, the program follows accepted practices for a contributions program, and we observed only a few discrepancies: the statement of objectives lacks precision, and there are weaknesses in comparing planned with actual achievements. On starting up the program, a management group responsible for linking policy and operations was created. This group also developed important control and reporting mechanisms and monitored the program closely and frequently so that appropriate and timely decisions on corrective action could be taken. For example, the regulations were changed once to enhance program effectiveness. Studies were conducted to measure the public's awareness of COSP and to determine which media to use for most effective program promotion. Management used audits to improve program administration and performance. Some monitoring of program effects was also done. An evaluation framework was completed as the basis for a full-scale evaluation of the program's impacts, effects and achievements. The evaluation is scheduled for 1984-85.

9.40 **Canadian Home Insulation Program – CHIP.** CHIP, approved in 1977, was originally administered exclusively by CMHC, and was to last seven years, at a cost of \$1.3 billion. The primary purpose was to stimulate action by individual Canadians in insulating homes to save energy used for space heating. CHIP was extended by the NEP to 1986, with the total cost to be \$2.2 billion. The program now makes a taxable contribution of up to \$500 for eligible improvements to residential insulation. About \$224 million was paid out in 1982-83; from the inception of the program to July 1983, about \$700 million had been paid out.

9.41 Our review of the program files and records indicates that this program has been operating in a highly turbulent environment. One report indicates that, in 1977, the program had an unexpectedly slow start. Accordingly, in early 1978, steps were planned to increase the number of homes to be re-insulated under CHIP. However, in August 1978, as part of a fiscal constraint program, the Prime Minister announced that, over the current and next fiscal years, the CHIP budget would be cut by \$122 million of an originally envisaged \$350 million. By April 1979, the price of oil had gone up, and slow take-up of the program was again perceived to be a problem. The budget was increased, and the contribution formula was changed to make participation more attractive. By July 1979, it was recorded that needed changes in the application process were being deferred, pending government decision on energy policies, including the future role of CHIP. By November 1979, the

decision had been made to transfer delivery responsibility for CHIP to the provinces and to increase funding to \$1.8 billion until 1986. At the same time, CMHC was to cease program delivery on 1 September 1980, and program management responsibility was transferred to EMR from CMHC "to allow energy rather than the housing aspects of the program to be stressed." In early 1980, the Government announced that measures would be introduced to improve existing home insulation programs. In August 1980, a CHIP Secretariat was authorized in EMR with a staff of 10. At this time, the Treasury Board required that the application process be substantially changed and a two-step application process be adopted. With the NEP announcement in October 1980, CHIP was increased in size to \$2.2 billion, and program management responsibility was immediately transferred to EMR, with financial responsibility to be transferred 1 April 1981. CMHC was to continue to review applications and issue contribution cheques, under an agreement negotiated with EMR.

9.42 A major evaluation of CHIP started in mid-1981 and was completed in the summer of 1983. Instead of repeating some of this work in our audit, we relied on the information collected in the evaluation. We also examined some aspects of CHIP that were not covered. For example, we examined other CHIP program reviews and evaluations to determine what problems had been identified earlier and what corrective or adaptive action had been recommended.

9.43 From our review, we concluded that, even considering the turbulence described, the implementation and operation of the CHIP program should have been better. The processes linking the policy-setting and operational levels of the program have been poor, monitoring has been inadequate and corrective action has been sporadic and often ineffective. Many improved management controls are now being implemented.

9.44 There were weaknesses in the procedures linking the operational and policy-setting levels of the program. A contributing cause to the weakness was that, on starting-up the program in 1977, a full-time, dedicated management group was apparently not formed in CMHC. Following the transfer of program responsibility to EMR in August 1980, the creation of the CHIP Secretariat with a staff of 10 was approved. This Secretariat had as its major role the management of the program, including linking operations and policy. At the time of the audit, the Secretariat was still below its authorized staffing level. The consequences of this weakness were several, including the use of unauthorized practices. For example, internal documents indicate that it had been program practice to recover CHIP payments in those cases where inspections revealed faulty installation. This practice was terminated in 1982 when it was found to lack proper authority. However, by termination, it was reported that about \$300,000 had been improperly recovered. A manual of CHIP procedures relating policy and practice was started in May 1982; only recently has liaison between CMHC and EMR become adequate.

9.45 Some monitoring of the program was done, but an integrated, comprehensive approach is still being developed. Although the original program design of 1977 envisaged comprehensive monitoring activities, the original staffing authorization did not provide the necessary personnel. In the early years of the program, several contracted monitoring

studies were either conducted or planned by CMHC. In March 1983, as part of the CHIP evaluation, a report on the CHIP inspection system was completed. It concluded, in part:

... the present CHIP inspection system does not provide sufficient objective and documented evidence to demonstrate whether or not the CHIP program is in control and meeting government program objectives...

9.46 In our review of numerous studies performed in the period 1977 to 1982, we found that appropriate corrective action frequently had not been taken. For example, the CHIP evaluation in 1983 stated that there was no formal quality assurance system, although the performance of this function was needed to achieve a major objective of the program, and its absence had been previously noted. The need to measure actual energy savings, the need for more consumer information, and the need to develop benchmark prices for materials were each identified several times but not satisfied.

9.47 An internal report, prepared as part of the 1983 evaluation, indicated that, during the period January to June 1982, five per cent of the disbursements were found to be incorrect or improper for various reasons. Our review of program inspection summaries also indicated a five per cent error rate in disbursements. The disbursement errors included making more than one payment to a particular address, payments for insulating a non-principal residence, and payments where work was not done. As we did not examine the procedures in CMHC for controlling the disbursement process, we were unable to determine whether this is an unreasonable error rate, but EMR and CMHC are continuing their efforts to reduce it.

9.48 Much corrective and adaptive action is now under way. As part of the CHIP evaluation, many reports were produced on various aspects of the program. As they are completed, they are reviewed by personnel in the CHIP Secretariat, and corrective action started. For example, regulation changes, designed to increase value for money, quality of workmanship and to tighten program control, have been implemented. A number of working and management committees involving CMHC and EMR have been organized and now meet regularly. The management information system has been revised and the quality assurance system redesigned. The recovery policy and the financial reporting systems have been redesigned. A system for monitoring energy savings was developed as a component of the CHIP evaluation and is to be implemented in 1983-84. A marketing organization, supporting CHIP, now exists in the Home Energy Programs Division.

9.49 **Distribution System Expansion Program - DSEP.** This program, announced in 1980, is managed by the Gas Branch in the Petroleum Sector. It is designed to help gas utilities enlarge their distribution systems, thereby expanding the market for natural gas as a substitute for oil. Gas utilities submit proposals for system expansion to the Gas Branch where they are reviewed. When specified selection criteria are met, a contribution of various proportions to the capital costs of the expansion is made. The program had spent or committed about \$100 million by March 1983.

9.50 This program, and two others in the Gas Branch, are examples of well implemented programs. The others are the Natural Gas Laterals and the Gas Marketing Assistance Programs. The links between the policy-setting and operating levels of the program have been effective. For example, the gas utilities were involved in the pre-implementation planning, and this involvement assisted in tailoring the program to suit the various provincial regulations that the utilities must comply with. In addition, two application processes were developed, each appropriate to different situations. This use of two processes was quickly approved by the Treasury Board. A manual of procedures for preparing proposals, and the terms and conditions of the contributions, were available at the outset of the program.

9.51 Ongoing monitoring was extensive: after six months of operation, an interim technical audit of a sample of ongoing projects was conducted, weaknesses were identified in the application process, and the review and approval processes were corrected. Important design features of the program were tested when studies of the application review and approval process were conducted. Some changes, resulting in greater equity, were made. At the end of the first full year of operation, a financial audit of all projects was planned.

9.52 We believe that the success in implementing this program can be attributed, in part, to the fact that the resources which management thought necessary were obtained and assigned to do the pre-implementation planning, the planned tasks and the ongoing monitoring. Specifically, DSEP had 10 senior staff for planning and design tasks and 16 staff involved in its subsequent implementation and operation. Further, management and staff at all levels were disposed to take appropriate corrective action; people were also assigned to make the needed corrections.

9.53 Each of the three programs in the Gas Branch follows good management practices.

9.54 **Forest Industry Renewable Energy – FIRE.** The FIRE program was started in 1979 with a budget of \$103 million for five years. In the NEP, the budget was increased to \$288 million and the program extended to 1986. Originally, FIRE was designed to help the forest industries use wood residues as a renewable energy source to replace oil. With the NEP, it was expanded to help industrial, commercial and institutional establishments use municipal waste, agricultural waste and peat to replace oil. The program makes contributions of between 10 and 20 per cent for eligible capital costs. The size of the contribution is determined so that the payback period for the applying organization can be reduced to as low as two years. By the fourth year of this seven-year program, \$58 million had been committed or spent.

9.55 In the first two years of the program, one, and then one-and-a-quarter person-years were assigned to plan, start-up and operate this \$100 million program. In year three, there were three and a half person-years; in year four, four; and there are now seven assigned to this program. FIRE has not been quickly implemented: the lack of permanently assigned personnel is the most likely cause. It should also be noted that the one person

responsible in 1978 for FIRE was also responsible for another program, Biomass Energy Loan Guarantee (BELG). BELG, with a budget of \$150 million, was to be a loan guarantee program to encourage the use of forest and municipal waste for heat and electricity generation. This program never proceeded beyond the pre-implementation planning stage.

9.56 Several important program implementation tasks were not completed satisfactorily or in a timely way. For example, until the latter part of the first year of program operation, there was a lack of application forms, master contribution agreements and administrative guidelines. Program advertising brochures were not available initially or for the first two years after the program was expanded under the NEP. The latter delay was reported to be due to a backlog of work in the departmental Communications Branch.

9.57 The monitoring and corrective action functions were weak. The initial project selection and eligibility criteria were based on a study conducted in early 1979 by consultants familiar with the forest industries. The reasonableness and validity of these criteria were not examined before late 1980. Studies in 1980, 1981 and 1982 identified design weaknesses relating to the criteria used to determine eligible projects and calculate the amount of contribution. Changes to the criteria or to the possible amounts of payment require Treasury Board approval. This has not been obtained. Further, the terms and conditions for receiving contributions are not being monitored for compliance; for example, annual cost saving reports are not being received in most cases.

9.58 It should be noted that most of these deficiencies had their roots in the early, under-staffed years of the program. As resources were assigned to the program, management implemented several improvements. For example, program promotion activities were expanded; a management information system was developed; documented procedures for review and approval were implemented; monitoring activities, including a post-completion survey of projects, were started; and studies were commissioned to evaluate program effectiveness. Also, an evaluation framework that could provide guidance to monitoring program impacts and effects has just been completed.

9.59 **Conservation and Renewable Energy Demonstration Agreements - CREDAs.** In 1978, Cabinet authorized a program whereby the federal government would enter into agreements with the provinces and territories to finance projects that would demonstrate energy conservation and renewable energy technologies. For various reasons, the federal-provincial agreement approach was used for program delivery instead of the direct, and more easily controlled contributions approach. Among other things, it was considered that this approach would better foster provincial government activity and capability in the energy conservation and renewable energy fields. The budget for the program was \$113 million, to be spent over a period of five years.

9.60 Between May 1979 and April 1980, agreements were signed with six provinces and two territories. In Alberta and Nova Scotia, there were federal-provincial arrangements in place which pre-dated the CREDA program and have not been replaced. In Quebec and Prince Edward Island, agreements were not negotiated, and federal delivery of

the program has only recently commenced. Consequently, our audit focused on the agreements with the six provinces and two territories.

9.61 Because the approach adopted called for the program to be delivered by the provinces and territories, the administrative and managerial resources assigned to the program within EMR were minimal. From 1979 to 1981, only one person was involved full-time. The program now has a staff of nine, reflecting the evolution of the federal role into a stronger one than was originally conceived. By April 1983, some \$35 million had been committed to about 300 projects. With the agreements ending in March 1984, it is expected that a considerable proportion of available funds will not be used.

9.62 There have been serious problems in implementing the program. Most of these can be traced back to inadequate staffing levels during implementation. We found no program strategy on which agreements could be based. After the program was launched, it became evident that the provinces and territories were not able to develop the necessary policies and procedures as quickly as had been envisaged or to assign the resources and staff. During 1979-81, the Department did not seek or assign the staff resources to provide the necessary back-up and impetus. Although many of the initial problems have been fully or partly resolved as provincial and federal capabilities have grown and the lessons gained through experience have been applied, it has taken four years of a five-year program period to achieve this.

9.63 Despite evident improvements in the management and administration of the program over time, our audit showed that deficiencies persist in such areas as the procedures to achieve information or technology transfer from the projects being funded; the controls over payments to the provinces and territories; and the availability and timeliness of management information. The weaknesses in financial controls make this the only program audited that is not satisfactorily administered.

9.64 While recognizing the difficulties of operating a technically sophisticated program through a number of federal-provincial agreements, it is our view that the persistence of the deficiencies results, in large measure, from the failure to have an ongoing planning and analytical function to support the program. Appropriate and timely corrective action has not, therefore, been possible on all issues. At the time of the audit, a proposal to extend and improve the program was being prepared, and steps to improve information and technology transfer were being taken.

9.65 The remaining program reports in this section are based on audit work done under our direction by EMR Internal Audit personnel.

9.66 **Atlantic Energy Conservation Investment Program - AECIP.** This program was announced in the 1980 NEP. It was designed to foster energy conservation and improve energy use efficiency in the Atlantic Region, and was to last five years and cost \$40

million. Contributions of up to 50 per cent of eligible capital costs are made for approved projects.

9.67 At the request of management, an audit of this program was conducted by internal audit and was completed in early 1983. It revealed a number of management control deficiencies that were largely corrected by July 1983. This experience serves to demonstrate the need for ongoing monitoring in the form of management review. An evaluation framework is being developed to help identify the issues that should be monitored in the area of program effectiveness. If staff is assigned to do this monitoring and management continues to take appropriate corrective action, the likelihood of this program performing as desired will increase.

9.68 **Industrial Conversion Assistance Program – ICAP.** This program is slated to run from 1983 to 1987 at a cost of \$30 million. It is designed to encourage the conversion of large boilers and process heaters from fuel oil to natural gas. Gas utility companies are to be heavily involved in administering the program. Contributions of up to 50 per cent of eligible capital costs of conversion will be made. The program had not begun making payments at the time of our audit.

9.69 The audit revealed that the pre-implementation planning, although informal, had been well done. Although all the planned tasks had not been completed at the time of the audit, applications procedures and guidelines had been prepared, review procedures had been defined and documented, and the selection criteria had been documented and appeared to support the program objectives. An evaluation framework was also being developed to specify indicators for ongoing effectiveness monitoring. Procedures for program promotion, audit and overpayment recovery were not yet defined. However, if personnel are assigned to do these tasks and the monitoring, and if management takes appropriate corrective action, the program will have a better chance of doing what it was designed to do economically and efficiently.

9.70 **Canada-Nova Scotia Subsidiary Agreement on Energy Conservation.** This is a five-year program designed to improve the efficiency of energy use, minimize the long-run social cost of providing energy, and develop plans and programs for the Nova Scotia energy system and its components. The agreement was negotiated by the Department of Regional Economic Expansion in 1978. Responsibility for the program was transferred to EMR in September 1982. There is joint federal-provincial funding of approved projects, with a total federal commitment of up to \$15 million by the program termination date of 31 March 1984. Responsibility for program delivery rests with the Province, which prepares and invites tenders, awards contracts and pays the contractor. Program administration and control are assigned to a management committee that has 50 per cent federal participation. EMR now has policy and program control responsibilities.

9.71 The management controls over program delivery are generally satisfactory, although monitoring and evaluation attempts have been somewhat less than adequate.

Program evaluation has been negligible, although EMR is now attempting to improve the situation.

9.72 National Energy Audit Program – NEAP. NEAP is an extension of the National Energy Bus Program that started in 1977, designed to assist small industrial and commercial establishments to analyse their energy use, identify areas of energy waste and plan and implement energy-efficient projects. NEAP, announced in the NEP, will terminate 31 March 1984 and cost about \$40 million. It is a program of federal-provincial agreements.

9.73 The management control framework for NEAP seems adequate to ensure successful program delivery. However, although generally adequate controls exist over the processing of payments to the provinces, we noted several minor irregularities in the areas of financial control. Further, although federal-provincial agreements make provision for audits, detailed terms of reference for such audits have not been developed.

9.74 Federal Internal Energy Management Programs. Three sub-programs were audited in this area. The Retrofit sub-program's objective is to "accelerate" government efforts to upgrade the energy efficiency of its buildings. The Off-oil sub-program is to help departments reduce oil consumption in buildings. The Propane Vehicle Conversion sub-program is designed to convert the fuel systems of 8,000 government motor vehicles to propane from gasoline. A major objective of each of these sub-programs is to "demonstrate" the cost-savings potential and the technology to the public at large. The expenditures are forecast at \$155 million over five years.

9.75 In 1980, we reported on our audit of the In-house Energy Conservation Program. In our current audit, we determined that the Department had taken appropriate corrective action in response to our findings in 1980, except for two issues. First, a theme of the observations in 1980 was the need for this program to play a stronger leadership role in internal energy conservation efforts of government departments. A recent management review identified this same issue; a proposal to address it is now being prepared. Second, we recommended a program evaluation, but an evaluation scheduled for 1982-83 by the EMR Program Evaluation Branch has been postponed until 1985-86.

9.76 Division management has satisfactory information about and control over its programs' operations. Specifically, management was fully aware of what each sub-program was doing, and available resources had been assigned on a priority basis. Some months before the audit, a program review had been conducted, weaknesses identified and corrective action initiated. This corrective action, slow to take effect, involved the creation of an interdepartmental committee and the preparation of a Treasury Board submission for program restructuring.

9.77 Some weaknesses were identified both by the auditors and the program review. All the official sub-program objectives were not being pursued because operational emphasis has been given to fostering conversions and retrofit activities, the more concrete objectives of

the program. For example, in all three sub-programs, the demonstration value of successful conversions was not being gained because there have been no satisfactory activities for communicating results or effecting technology transfer to the public.

9.78 In the Retrofit program, the objective, "to aid in the development of a body of competent energy conservation officers within federal departments and agencies", is not being pursued by program management.

9.79 The information that is needed to achieve three of the objectives of the Off-oil sub-program is not being developed. These sub-program objectives are to review all government facilities currently using oil; to identify their location in relation to natural gas delivery; and to develop a total cost package and time schedule for converting these facilities from oil to gas heating.

9.80 In the Retrofit sub-program, important program effects information is not available. For example, energy costs before and after Retrofit are generally not produced by departments and agencies. Consequently, valid economic or energy savings analyses cannot be performed and results cannot be communicated to the public.

9.81 **Propane Vehicle Grant Program.** This program will make a \$400 taxable contribution for conversion of fuel systems in commercial and farm vehicles to propane from gasoline or diesel, or toward the purchase of new propane-powered vehicles. One objective is to reduce oil consumption in Canada by 13,000 barrels a day by having 100,000 propane-powered vehicles on the road by 1985. A second objective is "to provide a clear and credible signal to the public" that propane is an acceptable substitute for petroleum products. The program expenditures are to total about \$40 million by 1985-86.

9.82 Although generally well administered, program start-up has been slow. The program is 30 per cent behind in its schedule of conversions and, at the time of the audit, there was evidence that little corrective action was underway. Several implementation tasks have not been completed satisfactorily. The program was launched in June 1981, but the communications aspects were not functioning adequately even by mid-1982. Corrective action was taken when responsibility for certain communication functions was reassigned to the program management from the departmental Communications Branch in late 1982. The original computerized applications review process was a failure but has since been corrected. There are still no satisfactory plans for appropriate post-payment audits.

9.83 **Compressed Natural Gas Demonstration Program.** This demonstration program was designed to provide information on whether compressed natural gas (CNG) is a feasible alternative to petroleum liquids as a fuel for motor vehicles. The costs were to be about \$1 million in the first year, funded from Energy R&D funds, and less than \$100,000 in each of two succeeding years. The program has two aspects: first, a taxable contribution of \$600 can be made toward the cost of converting a vehicle to CNG fuel; and, second, data on converted vehicles, engines, safety and fuel costs are to be collected. The one-year

conversion phase of the program is now over, and there were 474 of a targeted 1,500 conversions. Data are being collected over the next two years in two ways. First, a condition for individuals to receive the contribution is that they complete each month a "Vehicle Use Diary" of operating cost and experience for one year. Second, two contracts of about \$120,000 each have been awarded for the collection of similar data on two large fleets that have been converted to CNG.

9.84 The planning and control for this program have had both strengths and weaknesses. During the pre-implementation planning stage, program management took adaptive action. The NEP originally proposed a CNG demonstration program involving only large fleets but, as a result of industry interest, the program was expanded, with Treasury Board approval, to include individual vehicle owners. This was a major improvement as most of the subsequent conversions were by individuals.

9.85 Several pre-implementation tasks were not performed satisfactorily. Application forms for individual conversions were not available until six months after the program had invited applications, contributing to the fact that the program met only 30 per cent of its targeted conversions. Contractors being paid for assembling cost and experience data on fleets have not always provided useful information. It was observed that Vehicle Use Diaries had not been sent to individuals receiving contributions during the period February to May 1983, although completion of these diaries was a condition of the contribution; this has now been rectified.

9.86 **Summary conclusions.** Over 40 diverse energy programs involving over \$500 million of annual expenditures have been implemented or expanded and are now up and running with appropriate administrative controls. This is an impressive achievement.

9.87 The preceding programs that we audited show that the management of program implementation has varied in quality and appropriateness. The implementation of DSEP, COSP, NEAP and ICAP has been satisfactory, that of CHIP, FIRE, CREDAs and Propane Vehicle Grants has been less so. In some programs, important management functions were not performed. In COSP and DSEP, program impacts, critical assumptions, clientele needs and motives, levels of service, and so on were adequately monitored so that appropriate and timely corrective action could be taken. However, in the FIRE, CREDAs and CHIP programs, even where such monitoring has been done and weaknesses identified, timely corrective action has often not been taken. In CHIP and FIRE, this appears to be due in part to poor links between the policy-setting and operational levels of the program.

9.88 All but 1 of the 17 audited programs now follow good practices for program administration – applications are received, reviewed, and approved, and payments are made with appropriate controls. The CREDA program structure has inhibited the development of adequate financial controls. The most significant common weakness lies in the processes for monitoring program effects and taking corrective action – only some programs do this well.

9.89 In some cases, it is apparent that the resources assigned to a program have been insufficient to perform all the tasks needed for proper program implementation and operation. For example, in the FIRE program, with planned expenditures of \$100 million, only one person was assigned to design, implement, and operate. We believe that assigning insufficient staff resources to the implementation of some energy programs has also contributed to the lack of pursuing program objectives and, in one case in 1978, the non-implementation of one program – BELG.

Conservation and Non-Petroleum Sector Management Controls

Background

9.90 The Sector management group consists of the Assistant Deputy Minister, four Directors General, and their immediate staff. This group is now responsible for a staff of 461 and annual expenditures exceeding \$500 million, spread over the programs shown in Exhibit 9.2. In general, the role of the Sector is "to develop and maintain effective policies and programs for the efficient use and conservation of energy" in transportation, commercial and residential buildings, and industry.

9.91 The Sector was created in January 1980, and in its short history has experienced rapid change. It has grown from an authorized staff of 183 in 1982-83 to 461 in 1983-84. Since the NEP, principal managerial tasks have included preparing Treasury Board submissions, obtaining people to perform pre-implementation tasks (application form design, review procedure design, etc.), training people to operate the designed procedures, and making payments for approved applications. This has been difficult because of the number, size, diversity and complexity of the individual programs. The lengthy position classification and staffing processes have been a major constraining factor on managerial effectiveness – even considering that special procedures were established for EMR because of the NEP. It should also be noted that the acquisition of resources through Treasury Board submissions has demanded a very heavy commitment of top management time and energy.

Observations

9.92 In effect, the Sector has been operating as a conglomerate of independent program initiatives. Program implementation has, therefore, been conducted almost exclusively on the assumption that the individual programs are unrelated. This is understandable, considering the number of demands placed on the management group and the difficulty in getting a large number of diverse programs staffed and operating. In our view, the Sector approach in administering the individual programs separately has been appropriate. The transition to an integrated approach had only just begun at the time of our audit.

9.93 Most of the programs we audited are now well administered in that applications are being reviewed and cheques issued under appropriate controls. A factor contributing to this achievement has been the enthusiasm of managers and staff who have worked long and hard during this period. Sector management procedures have been

informal but, in the period January to July 1983, management introduced many formal controls, and we saw plans for their further development.

9.94 Our audits of the various programs give examples where it appears that nobody has been assigned the task of program monitoring. There were also examples where corrective action had not been appropriate. This indicates that Sector controls to ensure monitoring and appropriate corrective action have not been as effective as they might have been. There had also been limited use made of departmental internal audit and program evaluation in the Sector in the years prior to our audit.

9.95 While an effort to review objectives was made as a part of the recent preparation of the Sector long-term plan, we found inconsistencies between statements of objectives in this plan and in other operational planning documents. We concluded that inadequate control existed over the objectives-setting process in the Sector. The audit reports show that some managers pursued objectives different from those in official planning documents.

9.96 With the exception of the Electrical Energy Branch, the Uranium and Nuclear Energy Branch, the Coal Division and some areas in the Renewable Energy Division, we found that managers did not have available, nor had they prepared, up-to-date assessments of the markets or economic sectors their programs were supposed to be affecting. The recent evaluation of CHIP contained a major effort to obtain such market information, albeit in the sixth year of a 10-year, \$2.2 billion program. Some efforts have also been made on this issue for COSP.

9.97 The Sector has not developed the capability to monitor and assess its total environment. Without such assessments, it is difficult for the Sector to develop good policy advice, ensure its portfolio of programs is appropriate to meet its approved objectives, or ascertain whether the programs continue to be relevant in light of current or prospective market and economic conditions.

9.98 The Sector should require managers to monitor their programs and ensure that timely corrective actions are taken.

9.99 The Sector should conduct a thorough review of the statements of the objectives of its various organizational units and programs, and ensure consistency and control in changes to these statements.

9.100 The Sector should improve its knowledge of the environment within which its programs operate and of the impact of its programs on the environment.

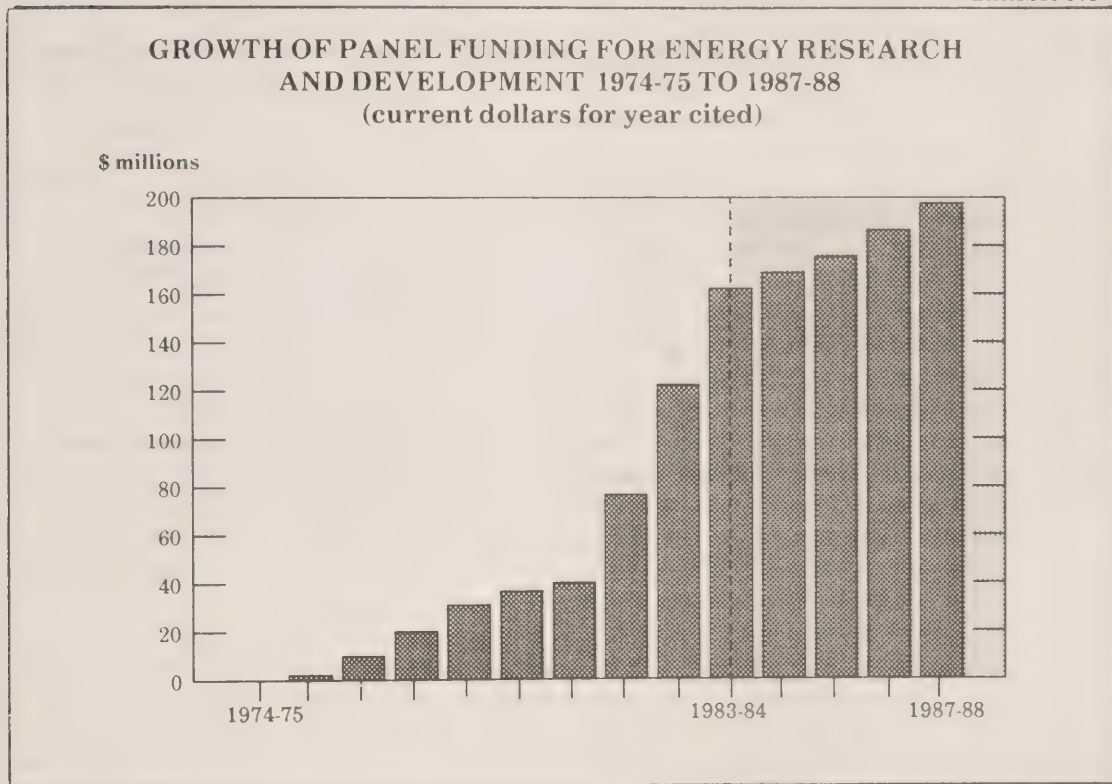
9.101 The Sector should develop a comprehensive plan for program review, audit and evaluation and ensure that reports are made and reviewed and that recommendations for improvement are acted on appropriately.

The Office and Panel on Energy Research and Development

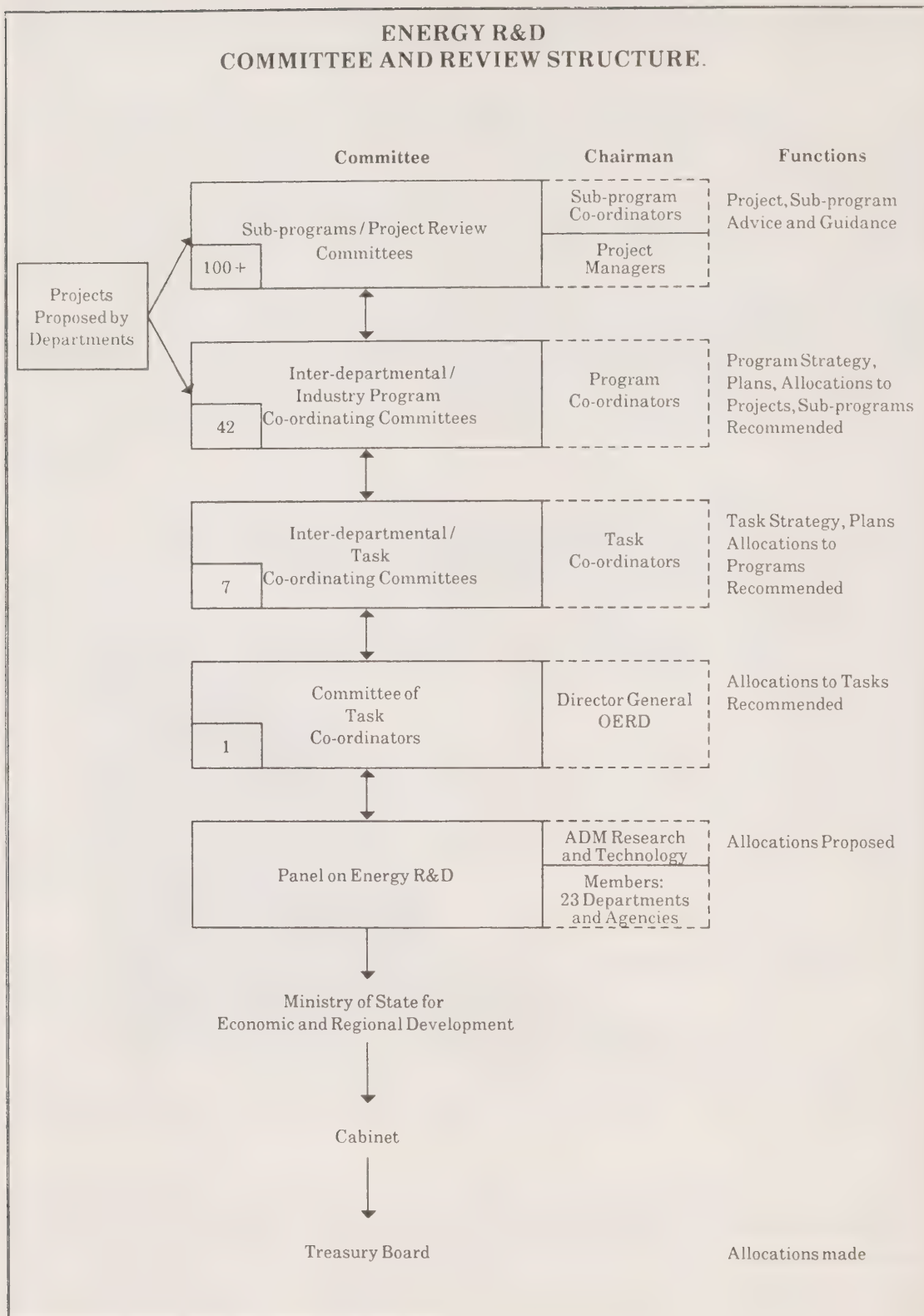
Background

9.102 The Office of Energy Research and Development (OERD) was created in 1974 to support a Panel of senior public servants responsible for energy R&D in various departments. The role of the Panel is to develop, implement, review and co-ordinate the federal energy R&D program. It includes advising Treasury Board on the funds for energy R&D to be allocated to each department or agency. By 1980, the funds under Panel control amounted to about \$40 million; by 1984, the total to be allocated had risen to \$162.6 million annually. The growth of expenditures since 1974 is shown in Exhibit 9.3.

Exhibit 9.3



9.103 The Panel has evolved a complex system for reviewing energy R&D resource allocation and use. The energy R&D expenditures are divided into seven general "task" areas. In turn, each "task" is divided into programs, sub-programs and projects. The Panel's review is in addition to the management review in departments receiving Panel funds. The Panel periodically gives policy guidance to the co-ordinators and managers of R&D.



Proposals to undertake projects are prepared by departments and agencies. Review of these proposals by interdepartmental committees is co-ordinated by the staff of the OERD, and proposed allocations of resources are presented to the Panel. The Panel reviews these proposed resource allocations and makes its recommendations to the Ministry of State for Economic and Regional Development, the Cabinet and Treasury Board, which decides on the actual allocation of resources. Exhibit 9.4 illustrates this review process. Twenty-three departments or agencies were involved in the process that resulted in allocating energy R&D funds to 14 departments. There are 42 Interdepartmental Co-ordinating Committees and more than 100 other review committees.

9.104 Audit scope. We examined the processes of the Panel and OERD in three areas: planning and co-ordination; selection and monitoring of R&D work; and review and assessment. We did not examine the quality or value of the energy research being done, or the appropriateness of the allocations made.

Observations

9.105 OERD is performing adequately as the secretariat to the Panel and as the co-ordination focus for federal energy R&D activity. But some areas, especially review and assessment, need improvement.

9.106 Planning and co-ordinating. The planning and co-ordination processes of the Panel and the Office were generally satisfactory, with one exception. During the early years of the Panel, it was decided to exclude from the Panel review and co-ordination process expenditures on already established energy R&D activities. In 1982-83, total federal energy R&D expenditures of \$338 million were expended as follows: \$103.8 million by AECL; \$123.1 million under Panel control; and the balance of \$111.3 million by various departments as part of their expenditures on previously established energy R&D activities. A further \$23.3 million was expended by departments in 1982-83 on science and technology aspects of energy development, including demonstrations of new energy and conservation technologies. The two departmental exclusions, totalling \$134.6 million, raise the question of whether the Panel co-ordination of energy R&D can be truly effective. Certainly, the Panel should consider these expenditures explicitly in the process of allocating the funds under its control.

9.107 Selecting and monitoring R&D work. The project or program selection and priority system at OERD has emphasized the professional judgement of scientists, technologists, policy and user groups and a number of research review committees in selecting energy R&D projects considered most likely to achieve federal energy objectives. On the basis of our interviews with participants and review of documentation, we concluded that, although the process is sometimes informal, the energy R&D expenditure allocation process performs satisfactorily. Monitoring has also provided reasonable assurance that funds are being used for the purposes approved at the program and project level.

9.108 However, increased levels of Panel funding, combined with a recent emphasis on commercializing energy R&D results, indicate that more explicit management procedures for selection and allocation should be considered in some areas. The significance of the emphasis on commercialization is that it is widely accepted that research conducted without considering innovation issues is less likely to lead to innovation than research that does consider these issues. Selection criteria can direct proposers of research projects to consider innovation issues. During our review, we found extensive guidelines and criteria for members of some program review committees. We also found other committees without appropriate guidelines or documented project selection criteria. Consequently, we concluded that the selection processes at OERD need to be more formal in some cases and thereby improved.

9.109 **Review and assessment.** In our audit, we examined the existing controls over 12 large projects. At the project level, the OERD review and assessment processes can involve a number of mechanisms, ranging from advisory, program or sector committees, to formal departmental project management systems, to independent, ad hoc review committees. For example, in February 1983, a review of the Fossil Fuels task was completed. CANMET, the lead federal agency on the Fossil Fuels task, prepared extensive review material for reviewers from OERD, the Ministry of State for Science and Technology and the National Research Council. We consider that many of the reviews conducted, although addressing useful questions in useful ways, were not sufficiently comprehensive (at the level of individual projects), nor were reviewers adequately independent to qualify fully as reviewers and assessors. Further, independent post-performance evaluations on much of the Panel task-level work between 1974 and 1982 have not been completed.

9.110 We concluded that, in general, review and assessment processes are insufficiently developed by OERD to ensure adequate external assessment of tasks and major programs.

9.111 We believe there is a need for a documented plan for reviewing and assessing all Panel-funded activities and the resources allocated to execute the plan. At the more general task and program level, periodic assessments, independent of program management, would address the questions of whether the funded activities are consistent with federal energy objectives and whether there is a reasonable expectation that activities will make a cost-effective contribution to promoting Canada's energy development. To provide the comprehensive coverage, there is a need for OERD to report to the Panel on departmental reviews and assessments of energy R&D activities. Such departmental reports would normally include periodic, independent assessments of project or program achievements, the relevance and quality of the research work conducted, and the likelihood that it will produce desired results.

9.112 OERD should make greater use of outside experts in their process for reviewing and assessing the effectiveness of energy R&D tasks and programs.

9.113 OERD should develop more explicit and formal project selection procedures for all committees.

9.114 The Panel should take steps directed to ensuring that all federal expenditures on science and technology for energy are explicitly considered in the allocation of Panel-controlled energy R&D funds.

Petroleum Incentives Administration

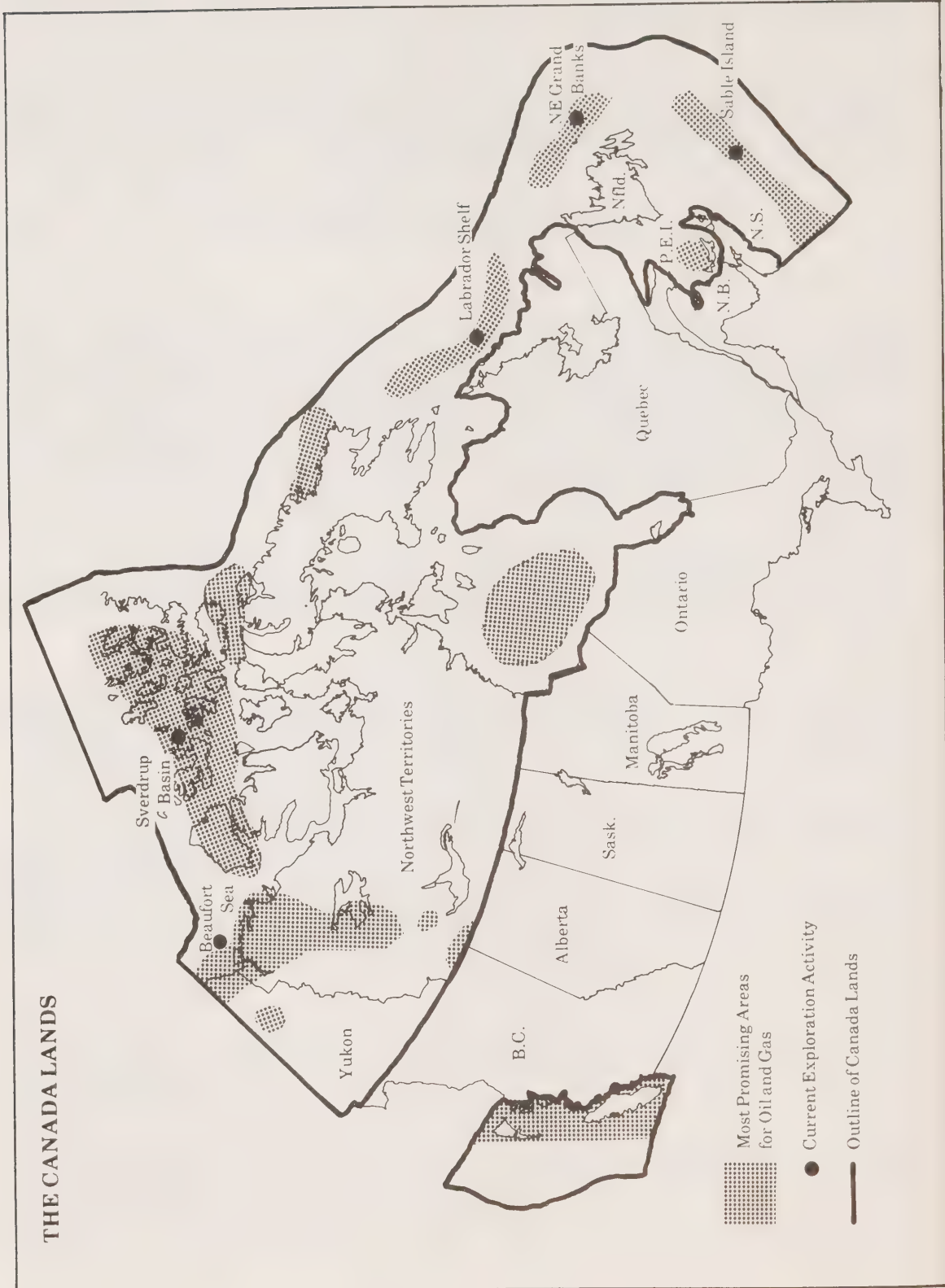
Background

9.115 The Petroleum Incentives Administration (PIA) administers two key pieces of NEP legislation: the Canadian Ownership and Control Determination (COCD) Act and the Petroleum Incentives Program (PIP) Act. These two proposed Acts were administered by separate organizations until July 1982, when the Acts were promulgated, and the administration brought together under PIA. In 1982-83, the operating budget of PIA was \$23.6 million and an approved staff level of 350. The total incentives expenditures are expected to be \$4.6 billion by April 1985.

9.116 In its operational role of delivering a key component of the NEP, the PIA contributes to two major objectives: "security of oil supply"; and "opportunities for Canadians to participate in their oil and gas industry."

9.117 The COCD Act provides for the issuance of certificates of Canadian ownership and control required by persons or companies applying for PIP incentives, Alberta petroleum incentives, and some types of exploration licensing on Canada Lands designated on the map in Exhibit 9.5. The PIP Act gives entitlement to incentive payments for eligible expenses of persons and companies meeting basic standards for ownership and control. Eligible expenses are those incurred for development and exploration for oil and gas in Canada. Both Acts specifically provide for the exercise of ministerial discretion under certain conditions. Discretion may be exercised in cases where the strict application of the legislation is determined by the Minister to be "manifestly unjust" (COCD Act) or "not in the public interest" (PIP Act). To a great extent, the exercise of ministerial discretion has been delegated to the Administrator, the senior officer of PIA.

9.118 The disbursement of large amounts of money to eligible groups for eligible expenses is the major task of PIA. A key function is to update the eligibility criteria by modifying the regulatory framework of the Acts as warranted by the energy situation, the state of the industry and the specific application. This updating function needs to be supported by analyses conducted on precedents, implications of the exercise of ministerial discretion, environmental trends, and evaluations of program impacts and effects. We believe that, as experience with the program increases, the program should, by design, evolve to a point where the application of regulations is the rule and where the number of precedents and the need for the exercise of ministerial discretion are reduced. This will



ensure that all applications are subject to the same rules and that these rules are known to all potential applicants.

Audit Purpose and Scope

9.119 The purpose of the audit was to determine whether due regard was exercised for economy and efficiency and satisfactory procedures were established to measure and report effectiveness, as well as whether compliance with authorities was achieved.

9.120 In this section, we report on program monitoring and evaluation; program control systems; records management; program delivery; and controls on program expenditures.

Observations

9.121 **Summary.** Although PIA is well administered in accordance with appropriate legislation and government practices, some key management functions are not yet adequately performed. Certain assumptions on which the program has been based have not been tested for reasonableness in the light of experience.

9.122 **Program monitoring.** In general terms, the purpose of monitoring is to determine where a program is going and how well it is doing. A well designed monitoring system can assist management in anticipating and reacting to operational problems and to a changing environment. Questions that a monitoring system could address and help to resolve in PIA include the following:

- Have circumstances changed sufficiently to warrant review of the Acts?
- Is there a need for regulatory amendments?

9.123 Monitoring of turnaround times for both COCD and PIP applications is carried out extensively. Prior to program start-up, PIA made significant attempts to forecast workloads. We found, however, that there was no formal system for monitoring actual workloads. In addition, performance measurement systems, although more advanced in PIP Operations, are generally not well developed for evaluating efficiency, and developing and making comparisons to standards. Management is aware of these performance measurement shortcomings, and significant progress has been made to improve the measurement systems and the use of performance indicators.

9.124 Although an attempt to develop a framework for monitoring the program impacts and effects was undertaken at one point, it has not been actively pursued. Currently, only special purpose studies are being proposed. We were advised by management that there are now plans to undertake, in the near future, a preliminary assessment to monitor short-term program impacts. Such monitoring work is also intended to contribute to a long-term program effectiveness evaluation.

9.125 Assessment of long-term program effects and impacts is also needed. On this issue, some of the main impacts that had not been determined at the time of the audit include:

- total costs and benefits of Canadianization and progress toward achieving security of oil supply;
- net effect of incentives on the level of exploration activity and the success rate of discovery of economic oil and gas reserves since the inception of the program;
- success of the program in attracting small investors and other sources of Canadian investments to the energy industry;
- relative costs and expected contribution to oil self-sufficiency of the Beaufort and Hibernia fields;
- impact on Canadian control in the oil and gas industry of substituting foreign debt for equity; and
- effectiveness of NEP funds invested in exploration incentives relative to conservation measures.

9.126 Program evaluation. An evaluation of PIA with a completion date of 1986 has been scheduled, but will be too late to provide information for use by management at key points in the life of the program. By the completion date of the evaluation study, more than \$4.6 billion would have been paid out in incentives. Given this level of expenditure and the high profile of the program, the proposed evaluation timetable should be of serious concern to the government. The conduct of this program evaluation is a corporate-level activity in EMR, requiring the involvement of several organizations in addition to PIA. Consequently, the planning and control of the program evaluation is beyond PIA jurisdiction, although PIA should play a key role in all phases of the evaluation.

9.127 Management has recognized the problem relating to the timing of the corporate evaluation study. A new plan was subsequently developed to address, on an interim basis, the most significant effectiveness questions for PIA and the industry. Other EMR groups will also participate in this process, with the results available by the end of 1983.

9.128 EMR should co-ordinate the scheduling of program evaluation studies to ensure timely information for the decision-making process.

9.129 PIA should ensure that the fundamental effectiveness questions pertaining to the PIA mandate are included in the evaluation study and that monitoring systems contribute to the evaluation data base. In the meantime, a proposed monitoring system should be implemented as soon as possible to generate an information base sufficient to permit management to respond to short-term program performance issues.

9.130 Control systems – PIP. Here we examined two critical systems – processing applications and processing payments. Payment controls ensure eligible applicants receive their entitled payments. Although the controls over applications processing are generally sound, our audit found areas needing improvement. The documentation of the case analyst's review and of the manager's review is insufficient at present. Management is aware of this shortcoming; it had been identified earlier by various sources.

9.131 PIA recognized that the case assessment process is vulnerable because analysts deal with information supplied by applicants, and the authenticity of this information is not verified at the time of assessment. To deal with this, a claims audit function was set up. At present, the audit activity is centering around the 1981 incentives year, for which payments commenced in July 1982. Four audits have been completed to date and reports have been issued. The remaining audits for the 1981 incentives year are to be completed by the end of September 1983.

9.132 Control systems – COCD. Again, we examined two critical systems – processing of applications for determination of control status and for determination of Canadian ownership rate. We found two weaknesses in the present systems. First, the case analysts' assessments are not subject to any internal guidelines regarding documentation of the evidence used in the analysis. For quality control purposes, it is therefore difficult to verify that the assessment has been adequately performed. Second, the procedure for conducting a quality review of the analysts' assessments is not clearly defined. Provision is made in the COCD Act for the audit of applicants and this function is in the planning stages. A procedures manual was being developed at the time of the audit.

9.133 Documentation of case assessment in COCD should be sufficiently extensive to permit verification of the adequacy of case analysis and subsequent review.

9.134 Records management. In our review of the program decision-making process, we observed that the documents summarizing key decisions in PIA are of uneven degrees of completeness. In particular, there were instances where documentation on applicants' files was insufficient to enable case analysts to identify relevant precedents. Furthermore, many central registry case records that we have reviewed were incomplete with respect to decisions taken by review and approval committees. Inasmuch as successful precedent analysis relies on the body of decisions already taken, this weakness in program records increases the risk of inconsistent and possibly unequal treatment of applicants. Generally, PIA does not analyze the reasons for discretionary decisions, their costs, and emerging trends in the use of discretions. Knowledge of these would be useful in the ongoing administration of the regulatory framework and should also contribute to the information base for program monitoring, assessment and application of financial controls.

9.135 PIA should ensure that documentation in applicants' files and central registry records is sufficient to allow for the review of the quality of case treatment and furnish the data for analysis of emerging patterns in the use of discretion. Any

trends in the exercise of discretion should be closely monitored and their implications analysed.

9.136 We noted one case where the regulations were changed to include previously non-eligible expenses. The conditions of applying the regulation were defined in such a narrow fashion as to be of benefit to only one applicant. We question the use of a regulatory amendment to permit payments to be made where the regulatory amendment is not designed to be of general benefit.

9.137 Program delivery. The critical program delivery functions are determining the eligibility status of applicants and ensuring that eligible applicants receive proper benefits. Under the COCD Act, there is a process to establish the Canadian ownership rate and control status of an applicant. The PIP Act and regulations specify a review of each payment application against expense eligibility criteria and approved incentive levels.

9.138 We found that PIA was generally functioning satisfactorily in determining applicants' eligibility and their entitlements. However, we noted that several key program delivery assumptions have not been reviewed.

9.139 For example, under the PIP legislation, when a PIP applicant undertakes exploration activity on a foreign-owned property, certain minimum working interests are required to be earned in order for exploration expenses to be eligible for maximum PIP payments. A part-owner's working interest is the proportion of the ultimate production to be received by this part-owner. On foreign-held and previously unexplored land, a PIP applicant who pays for 100 per cent of the exploration costs must receive at least a 50 per cent working interest ("two for one") for the exploration costs to be eligible for maximum PIP payments. Similarly, on foreign-held land where there is a known accumulation of gas or oil, a PIP applicant contributing 100 per cent of the expenses to drill a well must receive at least a 10 per cent working interest ("ten for one"). During our audit, we saw no evidence that these minimum ratios had been assessed for reasonableness in terms of NEP objectives and the economic expenditure of public funds.

9.140 PIA should review the reasonableness of the minimum working interests that must be earned before exploration expenses are eligible for PIP payments.

9.141 A second key assumption relates to the determination of control status. The control status of an applicant is a significant factor in program delivery, since Canadian control is a condition used to establish the level of benefits to be paid. The maximum incentive payment obtainable by a non-Canadian controlled applicant is 25 per cent of eligible exploration expenses; a Canadian-controlled applicant may obtain incentive payments of up to 80 per cent of its eligible expenses. For example, a particular company, Canadian-controlled and with a Canadian ownership rate of 70 per cent, incurring \$10 million of eligible expenses, would be eligible for PIP contributions of \$8 million. If that

same company, notwithstanding significant Canadian ownership, were foreign-controlled, the maximum incentive available to it would be \$2.5 million.

9.142 There are two ways that an applicant's control status can be determined. Applicants can apply to either PIA or the Foreign Investment Review Agency. Under the COCD Act, the PIA is required to adhere to an opinion of the Minister of Industry, Trade and Commerce, that designates a certain entity as Canadian controlled if the entity has sought such an opinion under the Foreign Investment Review Act (FIR Act). The existence of two procedures presents the risk that control status determinations may be inconsistently applied to different applicants with essentially similar ownership or control arrangements. The inconsistency can arise because the COCD Act allows PIA to use broader sources of information, compel disclosure and perform audits of the information provided.

9.143 PIA should review the process for control status determination and determine whether recommendations to amend the COCD Act should be developed in this regard.

9.144 **Controls on program expenditure.** We noted in our review of the governing legislation that the PIP incentives program is essentially demand driven. Approximately 95 per cent of the total expenditures are on Canada Lands, where exploration agreements with the industry are negotiated by the Canadian Oil and Gas Lands Administration (COGLA) in EMR. These agreements will be the basis for most of the demand for expenditures under the PIP program. This demand is potentially unlimited, and we consider that the potential demand pattern and magnitude should be well controlled. This requires that PIA have adequate information on estimated incentive payments arising from agreements negotiated by COGLA. The reasonableness of these estimates and long-term trends should also be considered.

Oil Pricing and Compensation Programs Branch

Background

9.145 Sections 65.11 to 65.19 of the Energy Administration Act provide authority for imposing a Petroleum Compensation Charge (PCC) on domestic and foreign petroleum as well as on foreign petroleum products processed, consumed or sold in Canada. Sections 71 to 76 of the same Act provide authority for paying compensation to importers of foreign crude, to producers of new conventional oil, special old oil and synthetic oil, and to companies for domestic transfer of oil from Montreal to Eastern Canada, as well as for exchanges of Canadian for foreign crude oil.

9.146 These charges and payments are made in pursuit of the following program objectives: to achieve a uniform price, exclusive of transportation costs, for crude oil used in Canada; to achieve a balance in Canada between the interests of consumers and producers; to protect consumers in Canada from instability of prices for petroleum in the international

market; and to encourage the development and production of an adequate supply of crude for Canada to be self-sufficient.

9.147 Section 77 of the Energy Administration Act introduced the Petroleum Compensation Accounting (PCA) concept. Effective 23 July 1982, the PCA brought together the Petroleum Compensation Charge revenues and expenditures under the Oil Import Compensation Program (OICP), New Oil Reference Price, Special Old Oil Price, Synthetic Oil Supplement Program and Domestic Transfer Compensation Program and the Crude Oil Exchange Program.

9.148 A summary of revenues and expenditures of the programs is shown below:

	<u>1982-83</u>	<u>1981-82</u>
	(millions of dollars)	
Revenues		
Petroleum Compensation Charge	\$ 3,031	\$ 4,265
Expenditures		
Oil Import Compensation	1,398	3,456
New Oil Reference Price	454	17
Special Old Oil Price	190	0
Synthetic Oil Supplement Program	916	720
Domestic Transfers Compensation Program	37	0
Crude Oil Exchange Program	<u>1</u>	<u>0</u>
	2,996	4,193
Surplus	<u>\$ 35</u>	<u>\$ 72</u>

9.149 For the purposes of establishing the appropriate level of the PCC, and given the commitment in the energy pricing agreement with Alberta to balance compensation revenues and expenditures by the end of 1986, surpluses or deficits are carried from one year to the next through the rate setting mechanisms.

9.150 In 1974, the Governor in Council asked the Auditor General to undertake a continuing inquiry into the administration of expenditures under the Oil Import Compensation Program. Since 1978, this inquiry involved an audit of the Petroleum Compensation Revolving Fund. In this audit, we continue this work and report on the administration of the revenues and expenditures of the Petroleum Compensation Accounting concept, of which the OICP is now only one element. We examined the OICP and Revolving Fund operations for the period 1 April 1982 to 22 July 1982 and the PCA for the period 23 July 1982 to 31 March 1983.

9.151 We concentrated our audit on the financial and management control of two functions:

- administering the Petroleum Compensation Charge (PCC) which includes forecasting and rate setting, and PCC revenue collection; and
- making compensation payments, which include compensation rate setting for imported oil, supplement rate setting for domestic production (New, Special Old oil and Synthetic oil), and the compensation and supplement payment processes.

Observations

9.152 Revenues. The PCC is the sole source of program revenue. Under the agreement with Alberta, it is intended that the total revenue will balance the program's expenditures by the end of 1986. The total revenue is dependent on the PCC rate applied against the volumes of oil consumed in Canada. The forecasting procedures used to set the PCC rate are well defined and communicated but are not formally documented. Branch officials consider all reasonable factors in recommending the level of the PCC. The charges to PCC payers are properly calculated, and collection procedures are satisfactory.

9.153 Expenditures. The expenditures are primarily the product of the compensation rates for the specified categories of domestic or imported oil and the eligible volumes for such production or imports. There are additional charges for exchanges and transfers. Appropriate procedures are in place to recommend the correct rates, and appropriate controls exist to assure that payments are made in correct amounts for eligible oils in accordance with the Act.

9.154 Program monitoring. The Energy Administration Act provides that the PCC revenue should be used to subsidize only specific categories of oil. The monitoring of eligibility for payments from the PCC is an important task. The rate for import compensation depends partly on world oil prices; thus, the monitoring of world oil prices is also an important task. Import compensation payments are made on import volumes net of exports by the importers. The assessment of the accuracy of reported import and export volumes is important.

9.155 Appropriate procedures and controls are in place to carry out the monitoring of the key pricing and volume factors for this program.

Conclusion

9.156 In our opinion, the Oil Pricing and Compensation Programs Branch has:

- appropriate financial controls over revenues and expenditures;

- the necessary management functions in place and operating satisfactorily;
- an adequate and timely report on the program, as required; and
- ensured that all payments in the fiscal year ended 31 March 1983 have been properly processed and that payment of compensation and supplement and collection of revenues are in conformity with applicable legislation and regulations.

Administration

9.157 Payroll costs management. An important factor in implementing the 1980 NEP was the ability to obtain personnel quickly. It has been generally perceived that administrative practices within government act as constraints and often inhibit departments from organizing resources promptly to carry out newly assigned tasks. EMR was concerned that the usual administrative practices in the areas of organizational approval, classification and staffing would make it impossible to get the NEP up and running quickly. To help overcome this constraint, EMR and its personnel staff were provided with considerable flexibility and support from central agencies.

9.158 Staffing where classification levels had not been approved was permitted on the basis of general descriptions of the work to be performed instead of formal job descriptions. Organization structures and classifications were often quickly approved by Treasury Board. Treasury Board also allocated 150 Special Assignment Positions (SAP) to the Department, enabling EMR to transfer quickly suitable persons from other departments, usually on lateral transfers. These transferees could immediately begin to plan and implement programs; job descriptions were only later written and approved. The Public Service Commission assisted the Department in its search for suitable persons to recruit or transfer to EMR. Finally, the Energy Sector was provided with its own personnel staff as part of special administrative resources committed to establishing the NEP. These people played a key role in implementing the NEP.

9.159 Despite this, there remained considerable constraints to putting the program in place. Even with the flexibility and extra support in the personnel areas, job filling took an average of 151 days (almost 6 months) to complete, due to such factors as the heavy workloads, complexity of the staffing processes and the difficulty in locating qualified persons. In addition, the Department found that provisions of the contracting regulations prohibiting "a master-servant relationship for contractors" prevented it from using private sector people on short-term assignments to meet unpredicted, urgent needs.

9.160 In our audit of the management controls of the payroll costs management function in the Energy Program of EMR, we recognized the challenge faced in establishing the NEP. Energy Program staff grew from approximately 370 in October 1980 to about 1,380 in March 1983. To cope with this growth, the staff of the personnel functions committed to the NEP grew from 6 to 44. We have made a number of suggestions to management concerning those personnel processes that need to be improved now that the

urgency of staffing for program start-up has diminished. These include staff planning and the audit of job descriptions and duties performed.

9.161 Program evaluation. Program evaluation is carried out in the Department by the Program Evaluation Branch which reports to the Associate Deputy Minister. The Department has adopted a policy for program evaluation, developed a long-term evaluation plan and established evaluation procedures conforming to government guidelines.

9.162 Last year, we audited the Program Evaluation Branch as part of the comprehensive audit of the Minerals and Earth Sciences Program. Based on our recommendations, EMR revised its policy on evaluation in April 1983. We recommended that the annual and long-term evaluation plans be developed on the basis of actual resources available in the Program Evaluation Branch. This has been done. The Branch introduced new management procedures to improve control over the conduct of evaluation projects.

9.163 The current level of resources assigned to evaluation is not sufficient for the Branch to evaluate all the program components of EMR within a seven-year cycle, which is the longest recommended by Treasury Board. In fact, the long-term evaluation plan of EMR is based on an 11-year cycle. Nor does the evaluation plan relate program evaluations to the "life cycle" of many of the Department's programs. For example, as indicated earlier, the Petroleum Incentives Program, involving some \$4.6 billion dollars for the period 1980-85, will be renegotiated prior to the originally scheduled evaluation. We pointed out to management that such a scheduled evaluation could have little affect on improving the management and effectiveness of this program.

9.164 The Department has asked Treasury Board to provide additional evaluation resources. The current plan, calling for an 11-year cycle, is clearly unsatisfactory, and there will be a need to find adequate resources to ensure that the timely evaluation of programs is carried out.

9.165 From its creation in 1978 to 31 March 1983, the Program Evaluation Branch has produced 22 evaluation outputs consisting of one evaluation framework; six evaluation assessments; nine evaluation studies; and six other evaluation-related documents. Sixteen of these evaluation outputs relate to the Minerals and Earth Sciences Program; six relate to the Energy Sector. However, the Energy Sector alone has more than 40 programs with forecast expenditures of many billions of dollars during the period 1981 to 1986. In our opinion, the Department has not devoted sufficient attention to the evaluation of these programs.

9.166 The Department decided to delay its evaluation effort on the National Energy Program until the end of 1982-83 on the grounds that it was a new program that first had to be implemented. However, the Office of the Comptroller General's guidelines on evaluation clearly specify that evaluation frameworks should be prepared at the start of new program initiatives. Until very recently, this was not done at EMR. As a consequence, required data

may not be available when the programs are to be evaluated, and the ability of the evaluations to provide timely information to decision-makers may be compromised.

9.167 During our audit of the Program Evaluation Branch, we examined half the evaluation outputs: four evaluation studies relating to the Minerals and Earth Sciences Program (MESP) and one to the Energy Program; four evaluation assessments relating to the MESP and one to the Energy Program; and one evaluation framework relating to the Energy Program. With the exception of one evaluation study produced more than three years ago, all the evaluation outputs examined were adequate, given the current development of the function.

9.168 Sufficient resources should be assigned to the program evaluation function to ensure timely evaluations.

9.169 **Internal audit.** This year, we assessed the Internal Audit Branch to determine whether and to what extent reliance could be placed on its work. Although we noted and reported minor deficiencies, we concluded that reliance could be placed on the audit work performed and that the Department has received value for money expended on Internal Audit.

9.170 **Financial management and control.** In last year's Report, we focused on financial management in the Mineral and Earth Sciences Program. This year, we carried out a preliminary review of the financial function in the Energy Sector.

9.171 The financial function has changed significantly since the 1977 follow-up of our 1975 Financial Management and Control Study. The report of the follow-up study performed by a firm of independent accountants included recommendations for improvement similar to those made in 1975.

9.172 In an environment of change, rapidly developing programs and increasing resources, financial system improvements are being implemented. But we are concerned over the time being taken to improve management information and financial services to program management. Managers, in some cases, have maintained their own information systems to provide appropriate control information.

9.173 Last year, we recommended that the Financial Administration Branch undertake a thorough assessment of the appropriateness of the Management Accounting Reporting System (MARS) in relation to the needs of various users. In response, the Branch has made revisions and planned to implement the resulting Financial and Managerial Information System (FAMIS) in October 1983.

9.174 Finance staff have a major role in providing a wide range of financial services and advice to program management. They have been directed to build relationships with

program personnel that will aid in managing financial and non-financial resources. We have noted some cases where financial staff are very much involved in program and financial management. However, we have noted other cases where financial personnel are not appropriately involved.

9.175 Finance staff should always be appropriately involved in program financial management and control.

9.176 **Management improvements.** At the time of our audit, improvements to the management process were being co-ordinated by the Director of Management Improvements of the Corporate Planning Group. Since 1979, improvements have been focused through the Management and Control Program (MAC). In 1982, this program was terminated and the unfinished projects were assigned to sector heads to complete. The original program is now about 70 per cent complete. During the past year there has been little monitoring of progress on the unfinished projects. When the MAC program was terminated, there was no validation of completed projects to determine whether the original deficiencies had been resolved.

9.177 During the year, progress has been made in completing some of the planned management improvements projects. For example, long-term plans for the Energy Sector have been prepared, Part III of the Estimates for the Energy Sector has been started and revisions to the management and financial information systems have begun. However, the overall status of the improvement process had not been determined by the Department until June 1983; and a revised action plan for management improvement was being prepared at the time of our audit.

9.178 **Information for Parliament.** Part III of the Estimates, containing the Expenditure Plan for the Mineral and Earth Sciences Program, was published in the spring of 1983. The Energy Sector has been directed to prepare its Estimates in this new form for 1984-85. At the time of our audit, progress was under way to achieve this goal.

9.179 **Audit of programs.** A control feature of many programs involving payments to or from the public and other levels of government is the right of the minister to order an audit of the related revenues and expenditures. These audits can aid in ensuring that the appropriate amount of revenue is collected, that recipients of payments meet the terms and conditions of agreements under which such payments are made, and that the payments are in the correct amounts.

9.180 We found that there is a need for more attention to be given by EMR to undertaking audits and reviews of major programs. Examples include:

- Canadian Ownership Control Determination - the control status determination is a key factor in the PIP payment process. The legislation was

promulgated in July 1982 but, at the time of our audit, control status determination audits were only in the planning stage.

- Canada Oil and Gas Lands Administration – no audits have been undertaken on public lands revenue amounting to \$3.3 million received during the year for oil and gas royalties.

Authority Issues

9.181 Departments and agencies of government require authority for their activities and for the resultant financial transactions. Our audit examined the procedures for ensuring compliance with parliamentary and other authorities. This audit work carried out in accordance with generally accepted auditing standards involved the testing of expenditure transactions processed through the departmental procedures.

9.182 We found no material discrepancies, and concluded that the required authority procedures are in place and operating satisfactorily. However, in the course of other audit work, we found some exceptions.

9.183 Registry of authority documents. As part of our audit we must examine supporting authority documentation. The departmental Secretariat is the place where a complete record of authenticated documents of authority would normally be found. We often had difficulty because the authority documents needed were often unsigned or not on file. The Department should have a complete registry of documents of authority.

9.184 Avoidance of Parliament's annual control of expenditures. In 1977, Parliament voted \$34 million in grants for oil substitution and energy conservation, subject to conditions approved by the Governor in Council. In accordance with this authority, these funds were deposited in provincial bank accounts and expended under five federal-provincial agreements over planned periods ranging from 3 to 10 years. It should be noted that this procedure avoids Parliament's annual control of expenditures.

9.185 Drafting of agreements. There has been poor drafting of agreements. Two of the above mentioned five 1977 federal-provincial agreements and a 1980 Conservation and Renewable Energy Demonstration agreement did not contain a paragraph prohibiting Members of the House of Commons from participating in any ensuing contracts, as required by the Senate and House of Commons Act. Also, the handling of interest earned from the bank accounts established for the earlier agreements is not defined. In three cases, interest was credited to the program. In two other cases, there was no evidence of any such interest credit where Canada had paid a total of \$4.5 million into the bank accounts. We did not examine in detail all transactions associated with these agreements but, in our review of available documentation, we did not find any indication that there had been a consequent abuse.

9.186 Violations of agreement terms were noted. In one of the above mentioned federal-provincial agreements, the required Governor in Council approval was not obtained for a further contribution by Canada of \$500,000 with respect to an additional project. Further, the additional project was not on the approved list of projects in the original agreement approved by the Governor in Council. No evaluations were performed; and most of the management committees responsible for overseeing the individual programs did not meet at least quarterly as required.

9.187 Information to Parliament. The Government of Canada has agreed to compensate the New Brunswick Power Commission up to \$25 million a year for losses associated with the renegotiation of a contract to export with the Maine Electric Power Corporation. The electricity was to be generated at the Coleson Cove facility of New Brunswick Power. These loss-subvention payments are authorized through the Estimates and appropriation process under "Non Petroleum Sources: Supply, Demand and Substitution". It is our view that the presenting of these payments in this way may mislead Parliament. It provides the appearance that such payments are being authorized for oil substitution where in reality they are to compensate the New Brunswick Power Commission for the cessation of oil compensation payments where the oil is used to generate electricity for export. Expenditures have been as follows:

	Non-Petroleum Sources Appropriations <u>Total</u> \$ million	Coleson Cove Loss-subvention <u>Appropriations</u> \$ million	Coleson Cove <u>as % of total</u>
1980-81	20.8	4.0	19%
1981-82	83.2	25.0	30%
1982-83	236.6	25.0	11%

9.188 Payments to an agent not authorized. Payments to an agent of EMR amounting to \$240.8 million made for the Canadian Home Insulation Program and the Canada Oil Substitution Program, are not authorized by the related Act. Payments to applicants by EMR are authorized while payments through an agent are not authorized. The Canada Mortgage and Housing Corporation is the agent for EMR in making these payments. The Department should suggest changes to the wording of the legislation to allow this practice, or the practice should be changed to be consistent with currently legislated authority.

9.189 Implementation of regulations. The Statutory Instruments Act states that implementation of regulations only begins after their publication, unless backdated. This had not been done in several cases for the Canadian Home Insulation Program (CHIP) regulations. For example, SOR/83-47 was published on 12 May 1983 without backdating. However, it was implemented on 9 November 1982, and payments made in the interim period were not properly authorized although operationally desirable. We observed two similar cases in the CHIP program.

9.190 The Department should ensure that:

- all agreements are properly drafted;
- there are procedures ensuring that terms and conditions of agreements are complied with; and
- the procedures to ensure compliance with authority are effective.

Canadian Ownership Account

9.191 The Government of Canada, as stated in The National Energy Program of 1980, established a Canadian Ownership Account (COA) to be used solely to finance an increase of public ownership in the energy sector. Revenues raised from the Petroleum and Petroleum Products Tax and the Gas and Gas Liquids Tax are placed in the Consolidated Revenue Fund but are earmarked for these stated purposes. To date, the COA has been used to enable Petro-Canada to acquire Petrofina Canada Inc. At present, the COA is committed to accumulating funds of \$500 million for the Government of Canada to participate in a joint venture with a group of major Canadian chartered banks for a financing offer to Dome Petroleum Ltd.

9.192 It is unclear to us who has prime responsibility for the Canadian Ownership Account.

9.193 Canadian Ownership Account transactions. We have undertaken an audit of COA transactions, which form a part of the Public Accounts of Canada. The following table summarizes the financial transactions in the COA for the 12-month period ended 31 March 1983 and 1982.

	<u>1983</u>	<u>1982</u>	<u>Total</u>
		(millions of dollars)	
Receipts:			
Petroleum and Petroleum Products Tax	\$ 615.4	\$ 567.7	\$ 1,183.1
Gas and Gas Liquids Tax	<u>273.7</u>	<u>218.7</u>	<u>492.4</u>
	889.1	786.4	1,675.5
Payments:			
To Petro-Canada regarding Petrofina Canada Inc. acquisitions	<u>897.9</u>	<u>710.9</u>	<u>1,608.8</u>
	<u>\$ (8.8)</u>	<u>\$ 75.5</u>	
Balance 31 March 1983			<u>\$ 66.7</u>

9.194 Dome commitment. On 29 September 1982, an agreement in principle was signed by the Government of Canada, four of the major Canadian banks, and Dome Petroleum Ltd. that subject to certain preconditions, financial support would be available to

Dome Petroleum Ltd., of up to \$1 billion. It provides, subject to certain conditions, for purchase by the Government of Canada of \$500 million of debentures of Dome Petroleum. Funding of the Government of Canada's purchase is to be advanced by the four Canadian banks and repaid from the Canadian Ownership Account. Dome Petroleum is not obliged to draw down the full \$500 million of debentures and no drawdowns are provided for after 31 July 1984. As of 15 September 1983, Dome Petroleum has not exercised the terms of this agreement and the Government of Canada has not purchased any Dome Petroleum debentures. It can be construed that such an agreement has served as a form of "letter of comfort" to the creditors of Dome Petroleum Ltd.

9.195 Weakness in managing public funds. In our 1982 Report, we commented on the \$1.7 billion acquisition of Petrofina Canada Inc. We stated that there is "a serious weakness in the management of public funds when departmental and central agency officials have had no responsibility to ensure that due regard to economy is demonstrated and value for money is achieved." We concluded that we were unable to ascertain whether due regard to economy had been demonstrated or achieved in respect of the \$1.7 billion acquisition of Petrofina Canada Inc., because of the lack of evidence of a pre-acquisition evaluation. We stated in our 1982 Report that, during our 1982-83 audit of EMR, we would continue our investigation into this matter.

9.196 During the past year, we communicated with senior officials of Petro-Canada, requesting evidence that due regard to economy had been exercised in using \$1.7 billion of public funds to acquire Petrofina Canada Inc. We also asked whether any post-evaluation of the acquired assets had been undertaken to determine what value had been received. The preparation of pre and post-acquisition evaluations is an accepted practice of prudent decision makers in the private sector. Although we have been informed by a senior official of Petro-Canada that a pre-acquisition commercial evaluation was undertaken, this has not as yet been made available to us. However, there is no indication that the evaluation considered the possible effects on the Government of Canada that would result from the acquisition. Effects on such matters as the balance of payments, foreign exchange, tax revenues and possible future capital requirements, in our view, merited pre-acquisition evaluation. Further, we were informed that a contract was awarded to independent appraisers in the spring of 1983 to conduct an evaluation of assets acquired, including oil and gas properties.

9.197 We have requested of Petro-Canada these evaluations but, as of 15 September 1983, we had not received them. Consequently, we have been unable to ascertain whether due regard to economy has been demonstrated and value for money achieved in the \$1.7 billion acquisition of Petrofina Canada Inc.

9.198 Total cost of the Petrofina acquisition to Canada. It would be expected that the vendor and purchaser involved in a significant transaction would structure the transaction to optimize their tax positions to their mutual benefit. Such knowledgeable parties would normally be aware of their tax costs or savings in arriving at their overall evaluation of such an acquisition or sale. The Government of Canada, through its ministers and its representatives on the Board of Directors of Petro-Canada, was party to the corporate

structuring involved in the Petro-Canada acquisition of Petrofina Canada Inc. The resultant structuring, involving the conversion of Petrofina Canada assets into preferred shares of Petro Canada Petroleum Inc., allowed the foreign owners of common shares of Petrofina Canada Inc. to be free of capital gains tax in Canada. We are unaware whether the impact on Canadian tax revenues was ever calculated and considered in pre-acquisition evaluations.

9.199 Financing the Petrofina acquisition. On the instructions of the Government, Petro-Canada arranged a loan to "bridge-finance" the purchase of Petrofina Canada Inc. shares. This instruction was complied with in such a manner that a gain of \$60.7 million was realized by Petro-Canada.

9.200 As agreed between Petro-Canada and the Government, the bridge-financing loan including interest costs is being repaid by funds received from the Canadian Ownership Account so that the financial operating results of Petro-Canada would not be affected. Interest to 31 December 1982 amounted to \$137,348,000. Governor in Council Order Number 1983-918, dated 25 March 1983, prescribed that certain common shares be issued at a premium equivalent to the bridge-financing interest cost. The premium on the shares was used to create a contributed surplus on the accounts of Petro-Canada against which the loan interest cost was to be applied, thus not affecting the financial operating results of Petro-Canada.

9.201 The audited financial statements of Petro-Canada for the year ending 31 December 1982, state that "such financing costs, net of deferred income taxes of \$60,744,000 have been charged against this contributed surplus". This means that Petro-Canada applied the bridge-financing loan interest cost against taxable income to reduce its tax liability. Thus, Petro-Canada is left with a credit balance or a gain in its contributed surplus account, in the amount of \$60,744,000. In other words, Petro-Canada received full compensation for the bridge-financing interest costs of \$137 million and reduced its tax liability by \$60.7 million, thus affecting favourably its reported financial position. Further, the total cost to Canada of this acquisition should take into account the \$60.7 million.

9.202 We cannot assure the House of Commons that the total economic implications and costs to Canada were considered by the Government of Canada in its acquisition of Petrofina Canada Inc., and that due regard for economy has been demonstrated and value for money achieved.

**DEPARTMENT OF THE ENVIRONMENT -
PARKS CANADA PROGRAM**

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Table of Contents

	Paragraph	Page
SYNOPSIS	10.1	335
Audit Scope	10.15	339
Observations and Recommendations		
Managing New Park Acquisition and Development	10.16	339
Information Relating to Program Delivery	10.26	343
Communicating with Government and Parliament	10.28	344
Assisting Management of Parks Canada	10.47	347
Acquiring Needed Information	10.52	349
Managing Professional Staff	10.57	350
Resolving the Status of Banff and Jasper Townsites	10.74	355
Revenue Policy	10.88	359
Exhibits		
10.1 Parks Canada Program		336
10.2 Distribution of Operational and Administrative Person-years, 1982-83		351
10.3 Revenues - a Five-year History		360

PARKS CANADA PROGRAM

SYNOPSIS

10.1 Overview. Parks Canada's activities are governed by the National Parks Act, which was amended in 1974, and by a Cabinet-approved policy statement developed after extensive public consultation. Its mandate, in summary, is to preserve the natural and cultural heritage of Canada for future generations of Canadians and to facilitate the appreciation and enjoyment of this heritage by present-day Canadians.

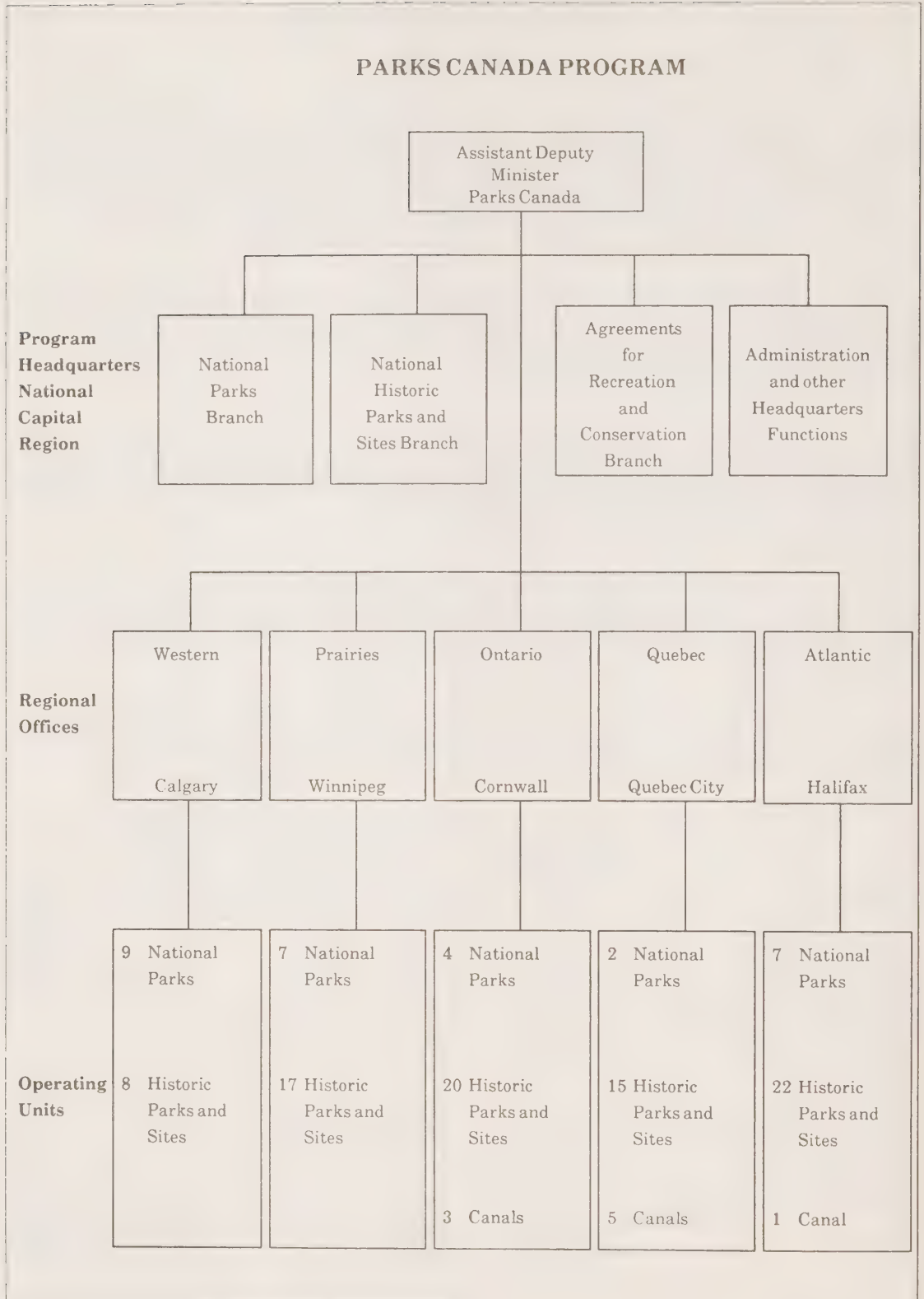
10.2 Natural heritage is concerned with the natural beauty of our nation; cultural heritage includes certain physical reminders of important aspects of our history as a nation. Canadians and others can appreciate and enjoy these by visiting various parks and sites maintained and operated by Parks Canada.

10.3 Parks Canada is a relatively self-contained program in the Department of the Environment. It falls within the envelope of the Ministry of State for Social Development. The program's organization is set out in Exhibit 10.1.

10.4 The parks, sites and canals have been acquired at various times throughout the past 100 years. Parks Canada is now one of the biggest owners of real property in Canada. The present replacement cost of the roads, buildings, exhibits and so on has been estimated at over \$3 billion.

10.5 The 1982-83 Estimates projected Parks Canada's expenditures and authorized person-years as follows:

Activity	Authorized Person- years	Expenditures (millions of dollars)			
		Operating	Capital	Grants and Contributions	Total
Administration	510	\$ 23.8	\$.4	\$ -	\$ 24.2
National Parks	2,615	82.2	63.6	.4	146.2
Historic Parks and Sites	1,216	35.2	18.0	.3	53.5
Agreements for Recreation and Conservation	717	20.4	19.0	-	39.4
Contributions to Employee Benefit Plans		14.6	-	-	14.6
Total Expenditures		176.2	101.0	.7	277.9
Less - Revenue		(19.5)	-	-	(19.5)
Add - Inter-department services provided without charge		11.5	-	-	11.5
Total	5,058	\$168.2	\$101.0	\$.7	\$ 269.9



10.6 The major categories of activities conducted by Parks Canada are:

- safekeeping of the natural and cultural heritage, which is the primary responsibility of an operating unit;
- operating and maintaining existing parks, historic sites and canals for the benefit of visitors; and
- extending these activities by acquiring, developing and building new operating units.

Some of these activities are inherently different and result in conflicts that exacerbate day-to-day management problems. For example, conservation in some sensitive areas is not compatible with access by the public, and physical development is often in conflict with conservation of the natural heritage.

10.7 Summarized audit conclusions. Parks Canada employees at individual parks, historic sites and canals display a high degree of commitment both to meeting the needs of visitors and preserving the natural and historical heritage within the parks and sites under their jurisdiction.

10.8 Initiatives taken by Parks Canada have established a pattern of growth resulting from the approved parks system plans without providing sufficient information on the total future cost implications, in terms of both the cost of acquiring and developing new assets and the cost of operating and maintaining them. As a consequence, funding and appropriation decisions cannot be considered within the context of total future financial requirements. For example, we found that:

- cost estimates for acquiring, developing and operating certain new and potential national parks and historic sites were, except in one instance, incomplete or non-existent;
- a backlog of recommendations made by the Historic Sites and Monuments Board for the commemoration of certain historic places represents a potential future obligation for Parks Canada to provide assistance or direct investment;
- a number of long-standing, unresolved operational problems represent probable future commitments; and
- planning and control of the development process were inadequate.

10.9 Parks Canada does not provide the information necessary to indicate how well it is fulfilling its mandate, nor does it have formal procedures to hold its employees accountable for producing the results necessary for delivering its program. For instance:

- attendance statistics lack credibility and do not constitute a reliable measure of park use;

- reported national economic impact of \$849 million in 1980-81 is, in our opinion, overstated, because it represents an aggregation of program expenditure and estimated visitor spending, plus the respending of these dollars by recipients, and does not take into account that a significant proportion of this spending is largely a redistribution of resources;
- specific program results are not adequately defined, evaluated or costed out; and
- systems are not in place to provide cost comparisons with other similar activities.

10.10 Systems required to supply the information needed for managing park operations have not always been developed in the most economical and efficient way.

10.11 Parks Canada has not managed certain of its professional staff resources in a manner that would ensure their most effective use in delivering its program. A review of a 20 per cent sample of professional and support staff in headquarters and the regional offices indicated that there is a need to reassess the use of professionals, since:

- professional advice is not readily available to appropriate levels of management;
- appropriate authority has not been granted to functional managers;
- professional services are not provided on the basis of program priorities; and
- the use of professionals and their work is not adequately controlled.

10.12 Parks Canada has not determined the most appropriate approach to follow in dealing with the future of the townsites of Banff and Jasper in the context of their impact on program resources and objectives. This has had the following consequences:

- external pressures for development in the townsites have not been dealt with effectively;
- services are provided to townsite residents at less than cost; and
- scarce resources are diverted away from operating the national parks of Banff and Jasper and into the two townsites.

10.13 Parks Canada's philosophy and policy relating to visitor-generated revenue result in visitors being treated inconsistently and receiving subsidized services.

10.14 Parks Canada management was aware of several of the problems which are commented on in this chapter. In some instances, management had already initiated corrective action and, in other cases, it was contemplating doing so.

Audit Scope

10.15 Our preliminary survey of Parks Canada indicated that, at a park operating level, it appeared to be doing a good job of delivering its program to the public. It seemed to be meeting the perceived needs of the people using its facilities in a very satisfactory manner and appeared to be achieving its primary program objective of conservation and preservation with both imagination and sensitivity. In view of this, and because most of the resources are consumed in the development and access aspects of the program, the detailed audit concentrated on the following areas of resource utilization:

- the management of major additions to assets, including acquiring and developing of new parks or sites and upgrading existing parks and sites, in view of its significance (\$101 million) in relation to the total Parks Canada Appropriation (\$278 million);
- certain activities relating to operations and control, including information needed for management, the operation of the townsites of Banff and Jasper, and the fees levied on visitor attendance at parks and sites; and
- the management of staff located at headquarters and the regional offices (chosen because of the importance of their specialist input to the delivery of the Parks Canada program and the relative materiality of this group compared to total payroll costs).

Observations and Recommendations

Managing New Park Acquisition and Development

10.16 Acquiring and developing new parks and historic sites, and upgrading existing parks and sites, add to Parks Canada's assets. These assets take the form of land, roads, campsites, buildings, exhibits, artifacts and the like. To maintain existing assets in an acceptable state of repair and to provide for needed capital replacements require a commitment of future funds. In addition, initiatives to establish new parks and sites and acquire additional assets for existing operating units will require a further future commitment of capital funds and additional operating funds, over and above the normal increases in costs associated with changing price levels.

10.17 We concluded that Parks Canada's initiatives have established a pattern of growth for the parks system without providing sufficient information on the total cost implications for the overall acquisition, development and operation of parks over a stated period of years. Therefore, funding and appropriation decisions cannot be considered within the context of total future requirements.

10.18 We examined six national parks and six historic parks, at various stages of development, spanning a period from the early 1970s to the present. In most of the cases examined, we found Parks Canada had entered into undertakings to acquire and develop new parks and sites without adequately considering the total costs likely to be involved. An

exception was Grasslands National Park, where estimated costs were provided as part of the proposal. Without appropriate cost estimates, it is not possible to determine whether acquisition and development are being carried out within controllable limits. The following were major examples:

- Parks Canada did not adequately inform Government of the estimated total cost of commitments made in an agreement with the Province of Newfoundland in 1973 to establish the Gros Morne Park. Subsequently, Parks Canada has estimated that the total capital costs of fulfilling the terms of the agreement would amount to \$130 million in 1982 dollars.
- There was no evidence of adequate cost estimates being provided prior to signing an agreement with the Province of British Columbia to establish the Pacific Rim Park.
- In acquiring the Nitnat Triangle, part of the Pacific Rim Park, under a federal-provincial cost sharing agreement, no limit was specified in the agreement for future federal spending.
- Properties at Dawson City were acquired for a nominal cost (in some cases for as little as \$1) without clearly considering, at the time, the expenditures that would be needed for stabilizing, maintaining and developing them in the future. The photographs opposite indicate the deteriorated condition of one of these properties at the time of acquisition and the restoration which has taken place in the intervening period. A ceiling of \$15 million in total capital expenditures to be associated with this undertaking has since been established. However, at the time of our audit, Parks Canada did not know the total restoration costs incurred in respect of individual properties.
- An obligation similar to that incurred in Dawson City appears to exist in respect of a property with 35 additional buildings that was acquired in 1975 at nearby Bear Creek (an abandoned gold mining property) for \$225,000. This property changed hands several times over the previous three years at prices not exceeding \$10,000. Since that time, the property has not been used for the intended purposes, except as a storage facility for artifacts.
- In one instance, Parks Canada submitted a proposal to Treasury Board for stabilization work on the substructure of Steveston Cannery, a proposed historic site for commemorating the West Coast fishing industry. Treasury Board advised Parks Canada, in July 1981, that the project required Cabinet Committee approval. Parks Canada has not yet submitted the proposal but, in the meantime, has acquired the equipment in the building for \$180,000 as an artifact, with the intention of developing the building as an historic site. Cleaning and repair of this equipment alone will require an estimated \$114,000. A further \$300,000 has already been spent on planning and other minor items subsequent to the Treasury Board ruling, but still no comprehensive plan, with costs of building acquisition, construction/stabilization, operation and maintenance, has been produced.

Dawson City Restoration



Winaut's Store, shown here in 1968, was bought by Parks Canada in 1972.

In 1977, the cost of restoring the interior and exterior was estimated at \$308,000. Although costs to date are not known, current estimates are that by the opening 1987-88, they will total \$500,000.

Winaut's Store in 1983.



10.19 Parks Canada has a backlog of recommendations made by the National Historic Sites and Monuments Board for commemorating certain historic places. These recommendations are seen by Parks Canada as an obligation of the Government of Canada and, although they may not create a legal commitment, some of them may become a future obligation for Parks Canada to provide some form of assistance or direct investment. We noted that, in 1981-82, Parks Canada had ranked the existing backlog in order of priority and had established a plan to deal with much of the backlog over a 10-year period.

10.20 In addition to future cost implications for new park acquisition and development, there are several long-standing unresolved operational problems that also represent probable future commitments. In most cases, the problems had been well identified, but there was no apparent sense of urgency to take remedial action. Examples follow:

- At three of the national parks we visited, sewage effluent exceeded guidelines, and certain local waters have been polluted for a number of years. Regarding drinking water at the same locations, Parks Canada does not comply with its own Department's criteria for water quality and testing. At Banff, for instance, it was only after a serious outbreak of giardiasis (intestinal disorder) that decisive corrective action was initiated, at an estimated initial cost of \$4.5 million.
- Certain highways and bridges, constituting public and traffic access, were observed to be potentially hazardous and in need of attention. These included needed run-away lanes which have not been provided on certain steep grades; guard rails which were lacking or in need of repair on certain hazardous highway stretches; and several highway and trail bridges which also needed repair.

10.21 When seeking approval for new park or site establishment and development, Parks Canada should estimate the total costs for the new park or site as a whole. These costs should be described in terms of both capital and operating requirements for the development period as well as the continuing operational and maintenance requirements once development is complete.

Parks Canada response: Estimates for establishing a new park or site include acquisition costs and the known development package. Usually, this initial development package is the result of negotiation and consultation with the province and with the public. These costs are now being developed along the above lines.

10.22 Regarding the systems and controls associated with developing new parks, we found several cases where no park development plan had been completed, despite significant development expenditures. Where development plans for individual national parks had been completed, they did not contain cost estimates, although, in the case of some of the historic parks, development plans did contain financial information.

10.23 Planning for development of a park is often fragmented and not done on a timely basis. Staff input into planning within Parks Canada has not always been properly co-ordinated, resulting in unclear responsibilities and authorities. Parks Canada has made an effort to review roles and responsibilities and resolve this problem, particularly regarding headquarters and regional roles. This review has been under way since 1978.

10.24 There is no formal monitoring and reporting on the progress and expenditures relating to a park, as an entity, through its identification, establishment and development. Expenditures are monitored only on the basis of individual capital projects. This does not provide adequate financial control over the development of the park as a whole. Parks Canada does not clearly communicate to Parliament its resource requirements for park development. The Estimates list only the funds required for individual capital projects, without identifying them as part of total park development or showing the costs of such development.

10.25 Parks Canada should develop and implement an appropriate planning and control system for use during the development period of a new park or site. The system should ensure that projects are begun only after the appropriate approvals are in place; responsibilities and authorities are clearly assigned; costs are properly accumulated and compared with target levels; and progress is monitored in relation to an approved schedule. Government and Parliament should be adequately informed of the total scope of the project and the progress being made.

Parks Canada response: Control of and reporting on progress and expenditures related to establishment of new parks and sites is undertaken by individual managers in the organizational levels where development activity occurs. It is true that monitoring all the development pieces does not provide an integrated reporting process for the whole. There is now a more detailed systems planning process technical manual being developed that will enable Parks Canada to put into place an improved control system for new park development work.

Information Relating to Program Delivery

10.26 As in other departments and programs, managers in Parks Canada need appropriate information to hold employees accountable for producing results related to the delivery of the program. They also need this information to communicate to central agencies and Parliament their resource needs and to indicate how well they are doing with the resources provided to them. There is a further requirement that they be able to satisfy themselves that this information is being acquired in the most cost-effective manner.

10.27 We observed that Parks Canada does not have adequate information relating to how well it is doing. For example, processes are not yet in place to supply appropriate costs and other data regarding its major operational activities. As a consequence, in communications with senior management and central agencies, some program information is limited. For instance, little information is presented to describe Parks Canada's primary mandate of conservation and preservation. Parks Canada does produce information on

attendance at parks and sites, such as visits, facility usage, interpretation, and so on, and on the general economic impact of the program. However, in the form presented, this information is susceptible to misinterpretation. In setting up systems and procedures to obtain these data, Parks Canada also has not always employed cost-effective and efficient approaches. These observations are discussed in more detail in the following paragraphs.

Communicating with Government and Parliament

10.28 The Department of the Environment prepared and presented to Parliament, in February 1983, its first Expenditure Plan (Part III of the Estimates) for the Parks Program. This additional information is directed toward improving the Government's accountability to Parliament by providing more and better information on each program, particularly with respect to program performance and resource justification. Since this was the first attempt to provide such information for the Parks Program, we did not conduct a detailed review of the Departmental Expenditure Plan relating to the Parks Canada Program. However, we believe that a number of recommendations in this chapter would provide Parks Canada and the Department of the Environment with an improved basis for future Expenditure Plans.

10.29 Attendance statistics. These statistics are often used by Parks Canada in communications to central agencies, Parliament and the general public. In fact, they are among the main specific indicators used to demonstrate program performance. Some recent uses of these data include Part III of the Estimates, written responses to the Public Accounts Committee and the Department of the Environment's annual report. In none of these were descriptions included to explain how the figures should be interpreted.

10.30 For example, many popular national parks have highways running through them. These undoubtedly encourage people to visit the parks. They also carry high volumes of traffic which are not park-related. In the western mountain parks, the TransCanada Highway runs through Banff, Yoho, Glacier and Revelstoke National Parks. The Yellowhead Highway runs through Jasper, and Highway 93 runs through Kootenay. Each of these highways is crucial to the east-west flow of traffic through the mountains.

10.31 The definition of a "visit" used by Parks Canada for compiling attendance statistics is the entry of a non-resident, tourism-related traveller into the park or site being reported. This definition, or caveat, is not included in the above-mentioned external communications and results in Parks Canada reporting as visitors those persons who are using the highways as a transportation route rather than as a means of gaining access to use the park. Through traffic, as described above, is exempted from paying an entrance fee to the park.

10.32 The examples below illustrate the extent to which through traffic influences attendance data reported to central agencies and Parliament.

10.33 In 1981-82, Parks Canada reported that 21 million people visited national parks. More than half of this total (11.9 million) was reported by the six mountain parks containing through highways. The figure of 11.9 million included 4.7 million through travellers. In the cases of Glacier and Revelstoke National Parks, the number of visitors reported for 1981-82 was 2.5 million, of which through traffic comprised 2.1 million, or 84 per cent.

10.34 Similar situations exist for Kootenay, Yoho (which counts vehicles only at the east gate) and Jasper, although at Banff, Parks Canada does adjust its figures to take out estimated through traffic. In Eastern Canada, we reviewed Terra Nova, Gros Morne and Fundy National Parks, which also contain through highways and have inconsistencies in attendance reporting.

10.35 Our detailed audit findings also revealed numerous compilation errors, inconsistent counting methods, multiple counts of visits, and obsolete or inconsistent conversion factors for estimating passengers in recorded vehicles, to arrive at reported attendance. For example, vehicles entering the south gate at Jasper are assumed to have an average of three occupants, whereas at Yoho, vehicles are assumed to have 2.5 occupants. In Banff, yet another factor is used. We could find no recent data to support these conversion factors. These variations serve to emphasize the inconsistencies in the statistics.

10.36 Parks Canada is taking steps to improve counting methods and accuracy, but has not yet resolved the issue of how to measure park use. In the meantime, it continues to report attendance statistics without distinguishing between people who are essentially through travellers and those who gain a fuller experience through a short visit or a longer stay.

10.37 Visits to historic parks and sites were reported at 4.7 million in 1981-82. Although this total appears to be substantially correct, data from some sites suffer from errors and inconsistencies. An extreme example is the Halifax Citadel, where entrants are counted at the gate (a reasonable basis) and reported to headquarters, where the reported numbers are inflated by 50 per cent before being published. For 1981-82, this practice increased reported visits by about 170,000.

10.38 Records are kept of boats passing through the locks of Heritage Canals, but the number of shore-based visits to the canals is not yet reported. Measurement of such visits is currently being considered by Parks Canada.

10.39 In our opinion, published attendance statistics lack credibility and do not constitute a reliable indicator of park use.

10.40 Parks Canada should re-examine its definition of a "visitor", together with related data collection and reporting methods, with a view to establishing:

- a definition and classifications that reflect, with reasonable accuracy, the purpose of each visit;
- methods of data collection that facilitate collecting and reporting data in a reliable, consistent, meaningful and cost-effective manner; and
- a reporting approach that facilitates understanding and minimizes misinterpretation of its attendance statistics.

Parks Canada response: Parks Canada is developing systems and procedures that respond to the concerns about visitor definitions, data collections and reporting.

10.41 Economic impact. Parks Canada, in a number of formal submissions, including the 1983-84 Part III of the Estimates and a report to the Public Accounts Committee, has reported that its program contributed \$849 million to the Canadian economy in 1980-81, as shown below:

	(millions of dollars)	
Program spending	\$ 221	26%
Re-spending of program disbursements	132	16
Visitor spending	310	36
Re-spending of visitor disbursements	186	22
	<u>\$ 849</u>	<u>100%</u>

That is, for every dollar of its budget, approximately three dollars were returned to the economy. It also reported that it had generated in excess of 50,000 jobs.

10.42 Approximately \$353 million, or 42 per cent, of the economic impact estimated by Parks Canada results from spending its own parliamentary appropriation and the re-spending of it. Since the budgetary resources were drawn in the first place from the Canadian economy, they do not necessarily represent an addition to national economic activity.

10.43 The remaining \$496 million, or 58 per cent of the claimed economic impact, is due to spending by visitors to parks or sites or re-spending by the recipients. Parks Canada, by attracting domestic tourism, probably prevents some spending from taking place outside Canada and, by attracting foreign tourists, encourages additional spending to take place in Canada. This has a favourable impact on Canada's foreign exchange position, and represents valid incremental economic benefits. It is not made clear, however, that tourist spending attributed to Parks Canada facilities might, in any event, have been spent elsewhere in Canada.

10.44 These data are published without the benefit of interpretive caveats to provide readers with a guide to their use. As a result, they can be misinterpreted and consequently may be misused. Publication of these data by Parks Canada without qualification gives the impression that the economic contributions are generated exclusively by, and would not exist without, the program. In practical terms, this may not be correct.

10.45 Parks Canada has subsequently estimated the economic impact of the program for 1981-82. We were informed that the impact was \$740 million, with 29,457 person-years of employment, including 5,058 Parks Canada staff. We have not examined these data, which were prepared on a basis similar to that used the previous year.

10.46 Parks Canada should ensure that information on the economic impact of its activities is presented to Government and Parliament in such a way that possible misinterpretation is minimized.

Parks Canada response: Estimating the direct, indirect and induced impact of Parks Canada and visitor expenditures on the national economy is largely an interpretive process. Parks Canada agrees that conclusions must be stated in the clearest possible manner to avoid misrepresentation.

Assisting Management of Parks Canada

10.47 Parks Canada needs appropriate information to manage the program and hold its employees accountable for results. This means that employees should have a clear view of how the activities for which they are responsible are contributing to achieving the required results. This requires both a performance measurement system, to indicate the degree of success in achieving results, and an appropriate accounting system, to make visible the cost of doing so. Assigning appropriate responsibility for achieving particular results would follow.

10.48 We noted that Parks Canada does not yet have a comprehensive framework, or program activity structure, for defining packages of results. Within Parks Canada, this framework would likely include, but not necessarily be limited to, the following activities:

- conserving, preserving and restoring natural and cultural heritage;
- interpreting this heritage for the appreciation and enjoyment of visitors;
- sustaining the visitor to the park or site by providing food, accommodation and recreation;
- providing visitor access by building and maintaining roads within park and site boundaries for vehicular traffic and by building and maintaining trails and walkways for suitable access to the more remote regions of the park or site; and

- providing services to other than visitors, including municipal services to certain park townsites, roads in parks for through transportation rather than visiting, and land leases for residential and business purposes.

10.49 Further, Parks Canada does not have an adequate cost accounting capability. As a result, it is unable to readily:

- ascertain the cost of its major activities;
- determine the cost of achieving intended results;
- make comparisons with similar functions outside the parks system, such as private sector campgrounds, golf courses, municipal services and the costs of building and maintaining roads; or
- establish an appropriate fee structure to allow for recovering the costs of certain of its visitors' services.

10.50 Finally, Parks Canada does not have a well developed measurement system to supply data for performance measures and tests of efficiency. However, we noted that, in the case of a number of operational activities (such as cutting grass, collecting garbage, providing campsite facilities and the like), appropriate performance measures were in place, and several current initiatives will result in future improvement. For example, the Maintenance Management System currently being implemented by Parks Canada should improve performance measurement and help to improve the efficiency of many other activities at the operating level. Similarly, a cost distribution system is being developed in conjunction with an improved program activity structure that may improve accountability.

10.51 Parks Canada should:

- ensure that its revised program and activity structure will enable it to measure results in significant areas of its activities;
- consider supplementing the cost distribution system currently being developed with a full cost accounting and reporting system; and
- implement additional appropriate performance measures that will enable managers to hold their subordinates accountable for relevant aspects of program delivery.

Parks Canada response: Parks Canada has assigned a high priority to the development of an operational planning system. The program activity structure is being revised in line with Treasury Board Operational Planning requirements, and the component parts of the overall system, including work plans with appropriate performance measures, are being developed.

Acquiring Needed Information

10.52 Processing data into information suitable for accountability within Parks Canada and for communicating with Government and Parliament requires the design and implementation of co-ordinated processes that match costs with operational outputs in an appropriate manner. These are often computer-based, and financial data are usually a major common input.

10.53 We observed that Parks Canada, in setting up systems and procedures to obtain needed management information, has not always developed its management information systems in a co-ordinated, cost-effective and timely manner.

10.54 Independent systems have been developed without adequate assessment of information needs and the possibility of integration with other systems. Systems were not co-ordinated to take advantage of any potential common elements or shared uses. For instance, the financial management system, which was a departmental initiative, was introduced in 1982 without taking into account the data needs of major information systems under development in the Engineering and Architecture, the Program Planning and Analysis, and the Socio-Economic Divisions. Logically, the financial management system would be expected to form the core of many of these other systems where cost or other shared information is required.

10.55 In some cases, the analysis of costs and benefits prior to systems implementation was inadequate. Managers needs were not clearly determined. Sometimes, the potential of the systems was overstated, with the result that some systems have failed to meet expectations. As an example, the financial management system, which is a purchased service, has not provided all the reports originally envisaged. Parks Canada has experienced significant difficulty in reconciling data to the central financial records of Canada. This failure on the part of the system supplier made it necessary for Parks Canada to consider costly alternatives and for operating managers to retain self-initiated, informal systems. In addition, the full costs of implementing the system had not been identified at the time of our audit.

10.56 Parks Canada should ensure that all new systems are compatible with existing or other proposed systems and can share common data, where appropriate, for maximum efficiency and cost-effectiveness.

Parks Canada response: Directives and procedures have been developed for the planning and development of systems in Parks Canada which will establish a mechanism to ensure that all relevant management functions are involved in the development of systems. This process should produce co-ordination of effort and maximum efficiency in system development.

Managing Professional Staff

10.57 Of Parks Canada's 4,515 operational and administrative person-years, 1,433 (31.8 per cent) are located in five regional offices and the National Capital headquarters. Exhibit 10.2 indicates the distribution of person-years among headquarters, regional offices and operations. Among the professional staff in headquarters and the regions, the available expertise includes such functions as engineering and architecture, interpretation, natural resource conservation, archaeological research, historical research, cultural resource conservation, socio-economic research, realty services and so on.

10.58 The roles of the professional staff in headquarters, and to a lesser extent in the regions, are to provide specialist advice to senior management, exercise functional authority over their counterparts in the field, and provide specialist services to the field.

10.59 We reviewed the activities of a sample of 20 per cent of the professional and support staff, selected as follows:

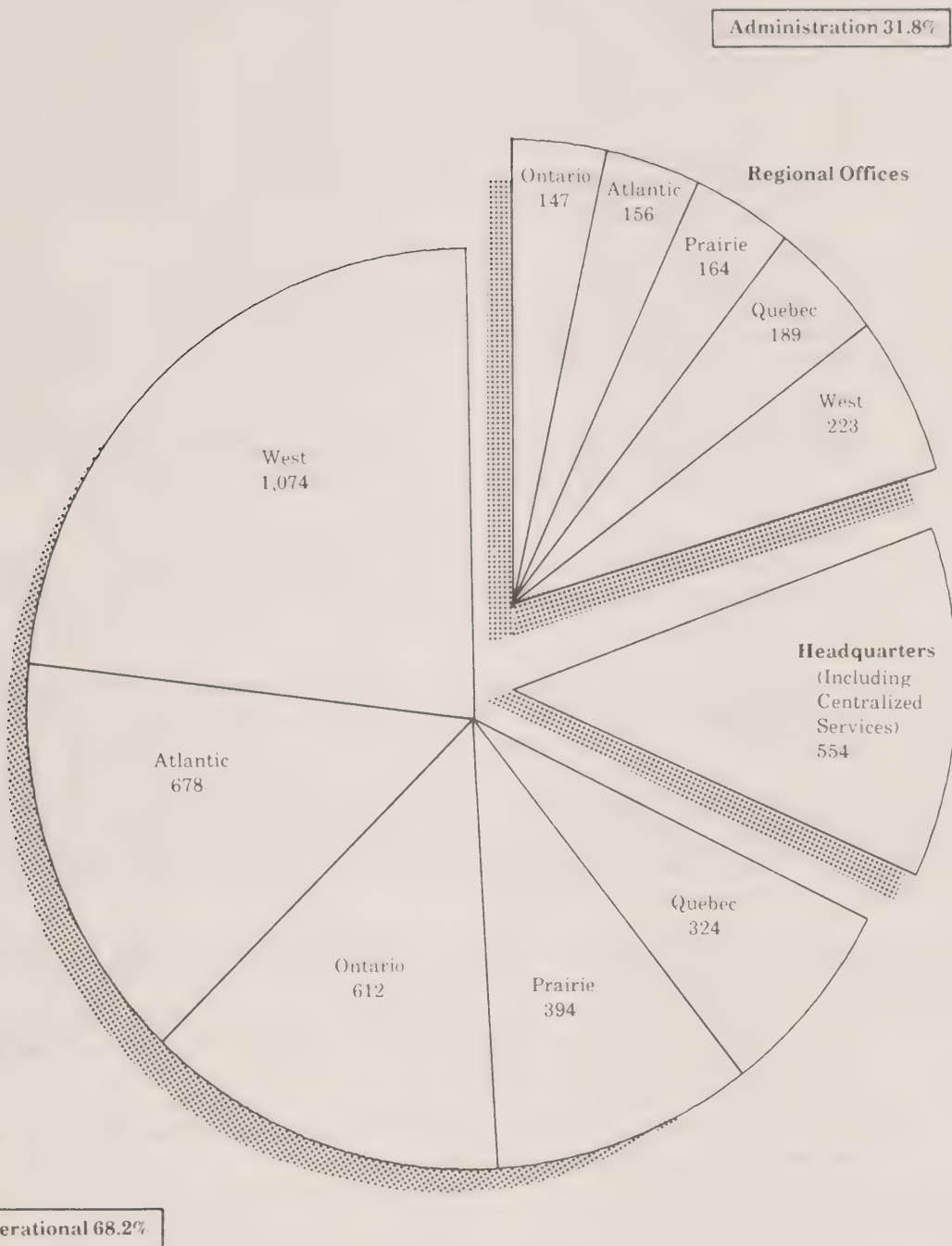
- 156 person-years associated with the engineering and architectural function at headquarters and 2 regional offices;
- 230 person-years associated with the historic parks and sites activity at headquarters; and
- 20 person-years associated with the socio-economic function at headquarters.

10.60 The majority of the individual employees in this sample of professional staff appeared to be dedicated to the objectives of the Parks Canada program, highly motivated and very knowledgeable in their areas of expertise. However, we found that, in general, they had not been managed in a manner that would ensure their most effective use in meeting the needs of the Parks Canada program. For the most part, these staff resources were being used to provide a variety of services on an as-requested basis instead of in accordance with any predetermination of program priorities. Furthermore, attempts to carry out a form of functional management normally associated with a headquarters function were generally ineffective.

10.61 The Engineering and Architectural function at headquarters. We found that, in the following ways, this group was not performing a role commensurate with its senior position relative to the more than 1,600 engineering, architectural and general works personnel in the field.

- The majority of its available resources (56 out of a total of 84 person-years) was engaged in providing specialist services to various parts of the program in headquarters and the field. However, the provision of these services tended to be on an as-demanded basis as opposed to being allocated in accordance with predetermined program priorities.

**DISTRIBUTION OF OPERATIONAL AND ADMINISTRATIVE
PERSON-YEARS
1982-83**



Total Operational and Administrative Person-Years 4,515

- Resources devoted to functional management were constrained by the absence of properly articulated and communicated responsibility.
- The development of directives, policies, standards and guidelines was limited, for the most part, to highly specialized areas with limited national applicability. Other guidance, related to more general areas, did not appear to be widely used in the field.
- Fewer than three person-years were used to evaluate the quality of the delivered product. The only formal review took place at the project proposal stage. Subsequent reviews were limited to sporadic inspections carried out during the course of field trips and occasional reviews of the finished product. These were insufficient to assess adequately how well the engineering, architectural and general works functions were being carried out.
- Insufficient information was received in headquarters to allow appropriate monitoring of project performance and the provision of advice, on a timely basis, to senior management.

10.62 Historic parks and sites activities at headquarters. The activities of this group of 230 person-years could be categorized in the following three areas:

- practising functional management relative to their field counterparts;
- providing some form of specialist services to the field or delivering some aspects of the Parks Canada program; and
- providing research and secretarial services to the Historic Sites and Monuments Board of Canada.

10.63 The practice of functional management involved 39 person-years. This took the form of producing and issuing standards and guidelines for use in the field and providing training, advice or other aspects of functional guidance. We found the standards and guidelines activity to be somewhat ineffective in view of the following:

- managers' responsibility for setting standards and guidelines had never been properly defined or communicated;
- considering the number and scope of historic parks and sites activities, very few standards and guidelines had been issued; and
- the standards and guidelines currently in preparation did not appear to be addressing the current priorities of the program.

10.64 Most of the 122 person-years providing specialist services to the field or delivering some aspects of the program from headquarters were not being adequately managed. We reviewed numerous projects and observed the following:

- projects were seldom identified in accordance with any set of program priorities;
- there was seldom any limitation on either the resources to be consumed or the time to complete the project;
- there was no evidence of periodic reviews being carried out to see that projects were on course and still relevant in relation to program priorities;
- cumulative project costs were unknown; and
- there were no status reports going to senior management.

10.65 In general, the activities of this group (relating primarily to military themes) appeared to be influenced by the highly specialized nature of the employees comprising the group. As a consequence, there is an inherent inflexibility in responding to desired changes in direction to meet changing program priorities. This is significant, because the need to change direction has been appreciated by Parks Canada since the early 1950s when the Massey Commission identified a thematic imbalance in the commemoration of historical sites and events. Parks Canada has been attempting to address this imbalance through developing a systems plan. However, very little progress has been made.

10.66 Approximately 36 person-years are deployed to provide secretarial, research and other related assistance to the Historic Sites and Monuments Board of Canada.

10.67 The Board was established by statute in 1953, as an entity independent of Parks Canada, to advise the Minister on the commemoration of historic places. Although the Act gave the Minister the power to assign departmental personnel resources to the Board, no direct relationship between it and Parks Canada was envisaged. The relationship established by the Act requires the Board to advise the Minister; the Minister, taking the Board's advice into account, may direct Parks Canada to commemorate certain historic places; Parks Canada is then obliged to implement the Minister's decision.

10.68 We observed that the affairs of the Board have become increasingly integrated with those of Parks Canada. In effect, Parks Canada assigns resources to the Board without the explicit approval of the Minister. There are three major consequences of this integration:

- the independence of the Board could be jeopardized in that the same employees are often working simultaneously for both Parks Canada and the Board;
- there is no way of recognizing or reimbursing Parks Canada for the Board's use of program resources not directly used in delivering the parks program; and
- the Minister and Parliament do not know the full costs of operating the Board and, therefore, cannot hold it accountable.

10.69 Socio-economic function. This function comprises 20 person-years. It devotes the majority of its resources, on an as-requested basis, to the following:

- analysis of the demand for visitor services, mainly as a budgetary support to ensure that proposed capital projects for visitor services are designed according to the projected demand;
- various studies for the field and headquarters of a socio-economic nature;
- functional guidance to the field for performing various statistical analyses; and
- issuance of standards and guidelines for use by the field when carrying out work of a socio-economic or statistical nature.

10.70 We found that there was scope for improving the use of professional staff within this function.

- Limited attention is paid to advising senior management on how visitor attendance statistics and economic impact analyses should be interpreted. Comment on the potential for likelihood of misinterpretation has already been made earlier in the chapter.
- The function is not offering advice to senior management on the socio-economic impact of the Parks Canada program compared to similar federal, provincial, municipal and private sector activities.
- The function is rarely used in the decision-making process leading to the acquisition of a new park or site. Its use is mainly restricted to analyses of specific projects once the major acquisition decision has been made.

10.71 Some of these deficiencies in the management of its professional resources had already been noted by Parks Canada, and initiatives were under way to deal with them. In particular, Parks Canada is involved in a reorganization of headquarters, establishment of roles and responsibilities throughout the entity, and an A-base budget review.

10.72 In conjunction with current initiatives, Parks Canada should take measures for more effective use of its professional staff by ensuring that:

- professional advice is available to management at the appropriate levels;
- responsibilities of functional managers are defined and communicated;
- professional services are allocated in accordance with program priorities;
- the professional output is monitored and controlled; and

- staffing levels are established in accordance with demonstrated program needs.

Parks Canada response: Parks Canada is involved in an intensive exercise to improve accountability for both functional and line management. Roles and responsibilities have been developed for all functions. Work planning procedures are being formulated to ensure that professional advice and direction are planned and provided for all functions and that the professional services required at each level are provided in an effective manner.

10.73 Parks Canada should review its relationship with the Historic Sites and Monuments Board and its current interpretation of the Historic Sites and Monuments Board Act with a view to:

- ensuring the independence of the Board; and
- displaying explicitly to Parliament the resources currently consumed by and for the Board.

Parks Canada response: The professional integrity and objectivity of the Historic Sites and Monuments Board of Canada is essential to the fulfillment of program objectives. Board members and Parks Canada officials will continue to safeguard the nature of the relationship of this advisory body with the Minister. Board costs can be separated from other activities under the Act with the current financial system.

Resolving the Status of Banff and Jasper Townsites

10.74 Significant townsites have developed in the National Parks of Banff and Jasper and, to a lesser extent, in other locations. The Banff and Jasper Townsites each have permanent populations in excess of 3,500, with seasonal variations that bring Banff up to 5,000 in the summer and Jasper to more than 4,300. As managers of these townsites, Parks Canada generally and the Park Superintendents in particular need to provide adequate municipal services. At the same time, they need to manage the affairs of the municipalities in a cost-effective manner that will:

- meet the residents' needs;
- provide appropriate visitor services;
- control future development consistent with the policies of Parks Canada, such as conservation; and
- reduce the financial and administrative burden on the program budget.

10.75 The following needs are implicit in these management requirements:

- provide the residents with municipal services, such as garbage collection and utility services, and recover the costs of those services through a form of municipal taxation;
- provide for the general safety of residents and visitors;
- deal with individual businesses to negotiate and administer land leases, concessions and licences;
- deal with individual residents holding land leases for residential purposes;
- monitor both business and residents to make certain that their continued tenancy is consistent with Parks Canada policy and the terms of the individual concession or lease; and
- react to a range of conflicting pressures from politicians, businesses, groups and individuals for dealing with aspirations and problems specific to the townsite as a community.

10.76 As a result of our review of how Parks Canada has managed these two major townsites, we concluded that it had not adequately resolved several important and long-standing operational problems.

10.77 Parks Canada's policy states that the towns of Banff and Jasper are visitor services centres whose boundaries are fixed. In the case of Banff, proposed changes to zoning would permit significantly increased densities which could have an effect on the program's primary mandate which emphasizes "ecological and historical integrity" – minimum disturbance of the original natural environment.

10.78 A second issue is local self-government for Banff and Jasper. A previous initiative in this direction was not adopted by the residents. We note, however, that Parks Canada still sees this as a future option; the 1983-84 Estimates (Part III) state as a program objective the introduction of amendments to the National Parks Act to provide for the future self-government of Banff and Jasper.

10.79 Examples such as these lead us to conclude that Parks Canada has not adequately resolved the future of the townsites within its own park policies. However, we noted that the program is currently implementing a planning process for the four mountain parks that should clarify these and other issues.

10.80 Controls over the development of the townsites were not effective, due, in part, to the absence of adequate town plans. This made it difficult for the program managers to deal adequately with the pressures for development from the private sector. For example, Parks Canada and the private sector occasionally exchange parcels of land inside parks and particularly within townsites. In 1982, an exchange took place in an attempt to preserve one

area of Banff from high-density residential development. In doing so, Parks Canada had not identified, and consequently had not complied with, all appropriate authorities and controls of central agencies and Parliament. This land exchange involved a differential in values of approximately \$550,000, favourable to the developer. Of this, approximately \$400,000 was rationalized by Parks Canada on the basis of social values to the park. In accordance with its customary practice in such transactions, Parks Canada assumed this transaction was within the authority of the Minister and did not seek Treasury Board approval, even though, some months before, an earlier version of the proposal had been formally submitted to the Treasury Board because it contained an unusual method for payment. This earlier proposal was rejected by the Board, which also noted that the normal procedures involving public advertising for tenders, requiring large payments up front and a share for the Crown in the income from the development ought to be followed in transactions of this type.

10.81 These procedures, suggested by the Treasury Board, were not followed by Parks Canada in adopting the second proposal, since it was considered to be consistent with practices followed by the program in earlier land transactions. The transaction was tantamount to Parks Canada acquiring \$970,000 of leasehold assets and disposing of others valued at \$1.5 million, and is an example of an unauthorized vote-netting practice. As a consequence, it was not subjected to the normal parliamentary approval process.

10.82 The right to live in townsites is governed by regulation. However, monitoring compliance is not carried out systematically.

10.83 The issue of who should pay for the townsites was addressed in a 1977 Cabinet directive, which authorized the preservation of nominal rent for residential leases, if the towns of Banff and Jasper became financially self-sufficient by local self-government or by paying the full costs of service. This was confirmed in 1980. If Parks Canada were relieved of the burden of townsite management, it was estimated at that time that \$4.5 million (including 47 person-years) could, if needed, become available for reassignment to other park tasks and needs. Parks Canada pursued the local self-government option, which was ultimately rejected. Although some increases were made in utility charges, full cost recovery was not realized. This was mainly as a result of delays in identifying relevant costs and the introduction of the Government's 6 and 5 Program. Residents continue to benefit from nominal rents. Specifically, we noted the following:

- Townsite operating costs are partially buried in general park costs, and no system currently exists for correctly identifying them. At the time of our audit, a cost identification system was being developed in which it is intended that direct townsite operating costs will be identified.
- Parks Canada has not acted on a previous recommendation that a townsite accounting system, compatible with those used in similar sized Alberta communities, be adopted. As a consequence, comparison of costs with other Alberta municipalities is not possible.

- Parks Canada charges to residents and businesses do not include costs of municipal services relating to roads, sidewalks, snow removal, fire and ambulance services.

10.84 In the case of Banff, we estimated that the cost in 1982-83 to Parks Canada of operating the townsite was \$1.7 million. This does not include related capital expenditures or the time of personnel located in the regional office and headquarters. Since only \$.6 million was recovered through billings to residents, the unrecovered cost of \$1.1 million, or approximately \$325 per resident, is effectively a subsidy by Parks Canada. This subsidy will be reduced somewhat in that Parks Canada also consumes some municipal services and should pay an appropriate share, although the extent of that share is not known. Also, if the town were under provincial jurisdiction, it would be eligible to receive grants toward municipal expenses, estimated by Parks Canada to be between 11 per cent and 16 per cent of the total costs. Because the town is federally operated, a similar grant may have to be paid by Ottawa. Alternatively, residents of provincial municipalities pay for capital works and municipal financing through local taxation; residents of Parks Canada towns do not. A situation similar to this also exists in Jasper.

10.85 The consequences are that:

- residents who comply with the need-to-reside regulation pay rents at a lower rate, resulting in a cost to the federal government of approximately \$3.5 million a year;
- residents are receiving municipal services at less than cost from the Parks Canada program;
- Parks Canada is obliged to devote substantial resources to municipal management that could be used elsewhere for activities more relevant to its mandate; and
- Parks Canada is unable to measure the operating cost-efficiencies of these townsites against those of other similar sized communities.

10.86 Parks Canada should clarify the status of the park townsites and its relationship with them in the context of its approved policy and ensure that its costs are minimized and that implicit subsidies are either eliminated or explicitly displayed to Parliament.

Parks Canada response: Consultation and negotiation with townsite residents is an ongoing process in Parks Canada. This process is being continued to pursue the objectives listed above.

10.87 Parks Canada should ensure that future land transactions comply with all applicable authorities, including, where appropriate, Treasury Board approval.

Parks Canada response: Parks Canada and Treasury Board are clarifying and rewriting guidelines for this process. These guidelines will direct future activity.

Revenue Policy

10.88 Visitors to parks and sites generate revenue for the Consolidated Revenue Fund by paying entrance fees to some parks and sites and by paying user fees for services such as camping, swimming, golfing, the use of canal locks and so on.

10.89 During 1982-83, Parks Canada generated approximately \$21.6 million in revenue (around 7 per cent of total expenditures) from the following sources:

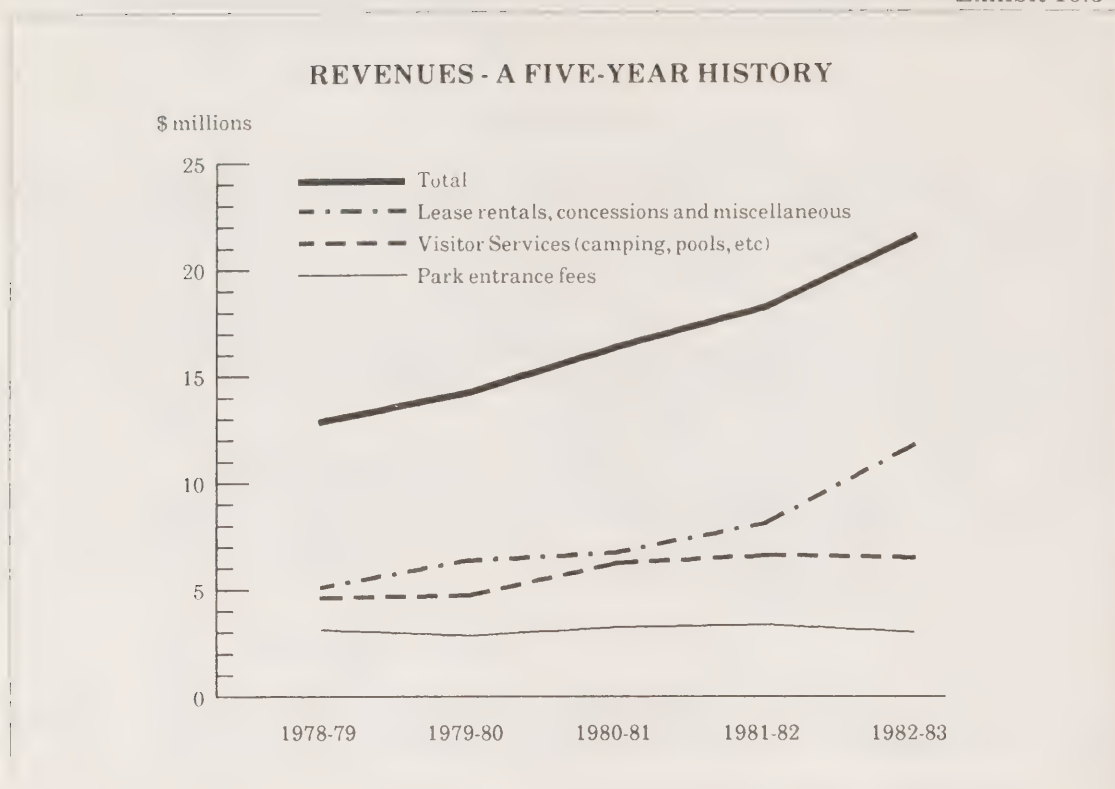
	(millions of dollars)
Entrance fees	\$ 3.2
Visitor services fees	6.6
Land leases and concessions	7.7
Miscellaneous	4.1
	<u>\$ 21.6</u>

Exhibit 10.3 shows total revenues and three main groupings of revenues over the past five years.

10.90 The entrance fees in total in 1982-83 amounted to \$3.2 million, or approximately 1 per cent of the total Parks Canada annual appropriation. Fees for visitor services in 1982-83 amounted to \$6.6 million, or 2.7 per cent of the appropriation. Thus, total visitor-generated revenue amounted to only 4 per cent of the total Parks Canada annual appropriation of \$284 million in 1982-83.

10.91 Parks Canada levies vehicle entrance fees at 19 of 29 national parks and personal entrance fees at 4 of 82 historic parks. It also levies specific user fees at visitor service facilities such as pools and campsites, and lockage fees on heritage canals. The policy for setting user fees for visitor facilities is to recover only direct operating and maintenance costs and not to recover capital or infrastructure costs. Fee levels have not kept pace with increases in costs; for example, lockage fees on Heritage Canals have not been increased since 1976.

10.92 Parks Canada does not monitor compliance with its entrance fee structure. For example, it estimates that 45 per cent of all vehicles entering parks do not pay the fee, many as a result of genuine exemptions such as for through traffic, but others are a result of false declarations of intent at the gate. There is little concerted effort to monitor those in the latter category. In many parks, those passing through pay no fees but are reported as visitors. Management does not require reports on revenues collected.



10.93 These findings, along with those discussed in previous sections of this chapter, have led us to the conclusion that Parks Canada has not fully thought through what its user-pay philosophy should be, does not ensure that the user-pay policies are applied equitably and consistently and does not have the cost information needed to do so.

10.94 Parks Canada should review its entrance fee philosophy for all its parks and sites to ensure consistent and equitable treatment of visitors. It should also rationalize and keep up to date its fee structure for visitor services in a manner consistent with recovering whatever portion of Parks Canada's costs is considered appropriate in accordance with general government policy.

Parks Canada response: Parks Canada is presently preparing a paper on entrance fee policy for submission to Cabinet. The paper will address the concerns listed.

DEPARTMENT OF LABOUR

DEPARTMENT OF LABOUR

Table of Contents

	Paragraph	Page
SYNOPSIS	11.1	365
Audit Scope	11.9	368
Observations and Recommendations		
Regional Operations	11.17	369
Management Information	11.19	370
Program Objectives	11.23	371
Alternative Methods of Program Delivery	11.25	372
Follow-up	11.27	372
Mediation and Conciliation	11.29	372
Effectiveness Indicators	11.31	373
Administration of the Government Employees Compensation Act	11.33	373
Computerization of Claims Processing	11.34	373
Financial Controls	11.36	374
Grants and Contributions		
Labour Adjustment Benefits Program	11.38	374
Labour Education and Quality of Working Life Programs	11.41	375
Data Dissemination	11.42	375
Survey of Wages and Working Conditions	11.43	375
Occupational Safety and Health Statistics	11.46	376
Electronic Data Processing	11.52	377
Program Evaluation	11.58	378
Internal Audit	11.59	378
Departmental Expenditure Plan	11.60	378
Exhibits		
11.1 Summary Organization Chart		366
11.2 Comparison of Accident Experience with Number of Safety Inspections, 1981 and 1982		371

DEPARTMENT OF LABOUR**SYNOPSIS**

11.1 In spite of its relatively small size, Labour Canada has a significant impact on Canadian employers and employees. It was originally established in 1900 to help resolve industrial disputes and to collect and distribute information on labour issues. Since then, its mandate has expanded to include protecting and promoting the health and safety of workers under federal jurisdiction and enforcing the labour standards in the Canada Labour Code. The Department delivers its programs through 18 district offices, 5 regional offices and the head office. Exhibit 11.1 provides a summary of the Department's organization.

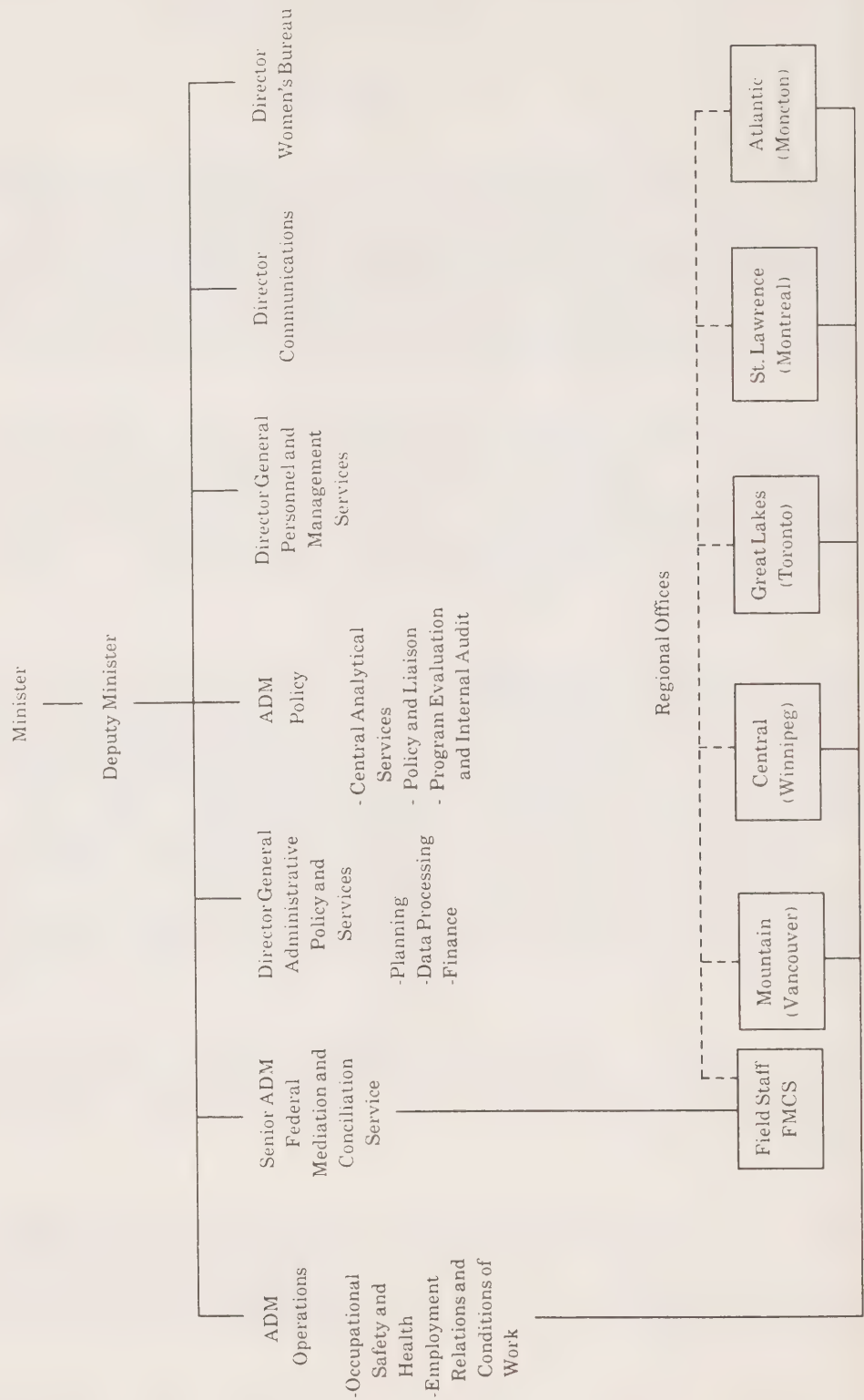
11.2 Senior management changed during our audit. Since most of our work was done before May 1983, our comments are based on systems that existed prior to the change in management. We noted, however, that management is taking a positive approach to problems we identified. Most of our observations relate to problem areas that management is aware of, has given high priority to, and is in the process of resolving. However, it was too soon to see the results of management's efforts.

11.3 Regional Operations. The delivery of the Occupational Safety and Health program and the Conditions of Work program was not well managed. For example, Regional Operations performed activities, such as inspecting and investigating complaints, without clear, measurable objectives for these activities. Although Regional Operations used a mix of activities such as education, promotion and counselling, explicit consideration had not been given to the most cost-effective mix of these alternatives. Information on companies in the Department's jurisdiction was inadequate to properly plan program activities and evaluate their effectiveness. Labour Affairs Officers did not regularly conduct follow-up visits to ensure that previously identified safety hazards had been corrected. Serious violations might as a result go uncorrected, and disasters, such as those that occurred in an east coast coal mine and a grain elevator on the west coast, might not be prevented.

11.4 Federal Mediation and Conciliation Service. The Federal Mediation and Conciliation Service had no major problems in the management controls in place to ensure economy and efficiency, although more complete effectiveness information should be reported to Parliament.

11.5 Administration of the Government Employees Compensation Act. Since 1979, the Department has known that it could realize considerable savings in processing more than \$30 million in claims each year by installing an automated processing system. We estimated that if the Department had implemented this system in 1979, it could now be saving at least \$375,000 a year.

DEPARTMENT OF LABOUR
SUMMARY ORGANIZATION CHART - 31 MARCH 1983



11.6 Labour Adjustment Benefits Program. The Department was given responsibility for this program by Parliament. However, it had not obtained from the Canada Employment and Immigration Commission sufficient and appropriate information to allow it to determine that payments, which in 1982-83 amounted to \$9.3 million, were made only to those who were eligible to receive them.

11.7 Program Evaluation and Internal Audit. Program evaluation and internal audit are basic management tools that do not have a high profile in the Department. Although there have been program evaluation activities since before 1979, senior management had not been provided with a complete evaluation report. One study was in progress. In our opinion, the Department has not made satisfactory progress in evaluating the efficiency and effectiveness of its programs, particularly given the extent of the resources allocated to the program evaluation function. Although internal audit identified significant problems in key activities, the Department had not ensured that recommendations made by internal audit were adequately resolved.

11.8 Electronic Data Processing. The needs and priorities for EDP services had not been adequately determined. As a result, the Data Processing Branch was unable to respond promptly to the needs of users. It had not, for example, been able to offer the guidance necessary to allow users to realize the savings possible through automated information processing, such as in the payment of Government Employees Compensation claims.

Audit Scope

11.9 Labour Canada is one of the smaller departments in the federal government, with 815 person-years and total expenditures of \$87 million in 1982-83. Despite its size, the Department has a significant impact on Canadian employers and employees. This is the first time it has been the subject of a comprehensive audit.

11.10 The Department of Labour was originally established in 1900 to help resolve industrial disputes and to collect and distribute information on labour issues. In the 1960s, its mandate was expanded to include promoting and protecting the health and safety of workers and setting and enforcing labour standards for the federally regulated jurisdiction. These responsibilities were consolidated in 1970 in the Canada Labour Code, which in part specifies minimum standards of employment, such as minimum wages, and requirements for safe and healthy working conditions. This part of the Code applies to approximately 3,700 employers and 600,000 employees in banks, interprovincial and international transportation and communications, certain Crown corporations, and industries deemed by Parliament to be in the national interest of Canada. The Department's programs in these areas account for 32 per cent of its person-years. We assessed the degree to which these programs were operated with due regard for economy and efficiency and had adequate procedures to measure and report effectiveness.

11.11 The Canada Labour Code also gives the Department a mandate to help resolve industrial disputes through mediation and conciliation. Because of the Federal Mediation and Conciliation Service's significant impact on work stoppages and the interest displayed by Parliament, we reviewed procedures for measuring and reporting effectiveness.

11.12 While the Canada Labour Code applies to only five per cent of all Canadian workers, Labour Canada's influence extends beyond this group, in part through the collection and dissemination of data on labour issues. Our review of data dissemination activities included the Survey of Wages and Working Conditions and the statistics unit of the Occupational Safety and Health Branch, because their outputs have many users both inside and outside the Department. These activities account for expenditures of just under \$1 million annually. We concentrated on the manner in which the Department had determined the needs of potential users and its methods of controlling the quality of its data.

11.13 Labour Canada administers the Government Employees Compensation Act, under which, in 1982-83, it paid about \$34 million to an estimated 50,000 injured employees and former employees of government departments and Crown corporations. This program accounted for 46 per cent of departmental expenditures in 1982-83. We reviewed the financial controls of this program and whether it was operated with due regard for economy and efficiency.

11.14 Parliament has also given the Department authority to make grants to specified workers and labour organizations. The Labour Adjustment Benefits Program assists workers who have lost their jobs due to import competition. The Labour Education

Program provides funds to unions and other labour organizations to educate workers on labour issues. The Quality of Working Life Program awards grants to employers, unions and other parties interested in experimenting with innovative forms of labour-management relations. We audited the adequacy of financial controls over these grant and contribution programs, which accounted for approximately 17 per cent of the Department's expenditures in 1982-83.

11.15 As well as auditing departmental programs developed in response to specific legislation, we examined operational planning, effectiveness monitoring, internal audit, program evaluation, and electronic data processing planning and control. These processes are essential to the successful operation of the Department.

11.16 In addition, we reviewed several areas and concluded that no detailed audit work was warranted. Human resource management had been audited recently by several groups, including our Office. Our review indicated that the Department was implementing recommendations from these audits, making further audit work unnecessary at this time. We relied on Internal Audit's examination of the financial management function. Other areas, such as the Women's Bureau, policy development and some administrative functions, were also excluded from audit because our initial review indicated there were no significant audit issues.

Observations and Recommendations

Regional Operations

Introduction

11.17 In 1982-83, Regional Operations spent \$10.3 million and used 260 person-years to ensure that employers under federal jurisdiction met minimum employment standards and provided healthy and safe workplaces. The federally regulated jurisdiction includes industries involved in interprovincial commerce, Crown corporations, and those companies deemed in the Canada Labour Code to be "for the general advantage of Canada". Examples of industries subject to federal regulation are railways, air transport, communications and banking. These industries include companies such as CP Rail, Wardair and Bell Canada. Crown corporations, such as Devco, are also under federal regulation.

11.18 The significance of Regional Operations activities is highlighted by the fact that, in 1981, approximately 82,000 workers were injured and 18 died in on-the-job accidents within Labour Canada's jurisdiction. Approximately 2,000 complaints were lodged by workers against employers for failure to provide minimum benefits specified in Part III of the Canada Labour Code.

Management Information

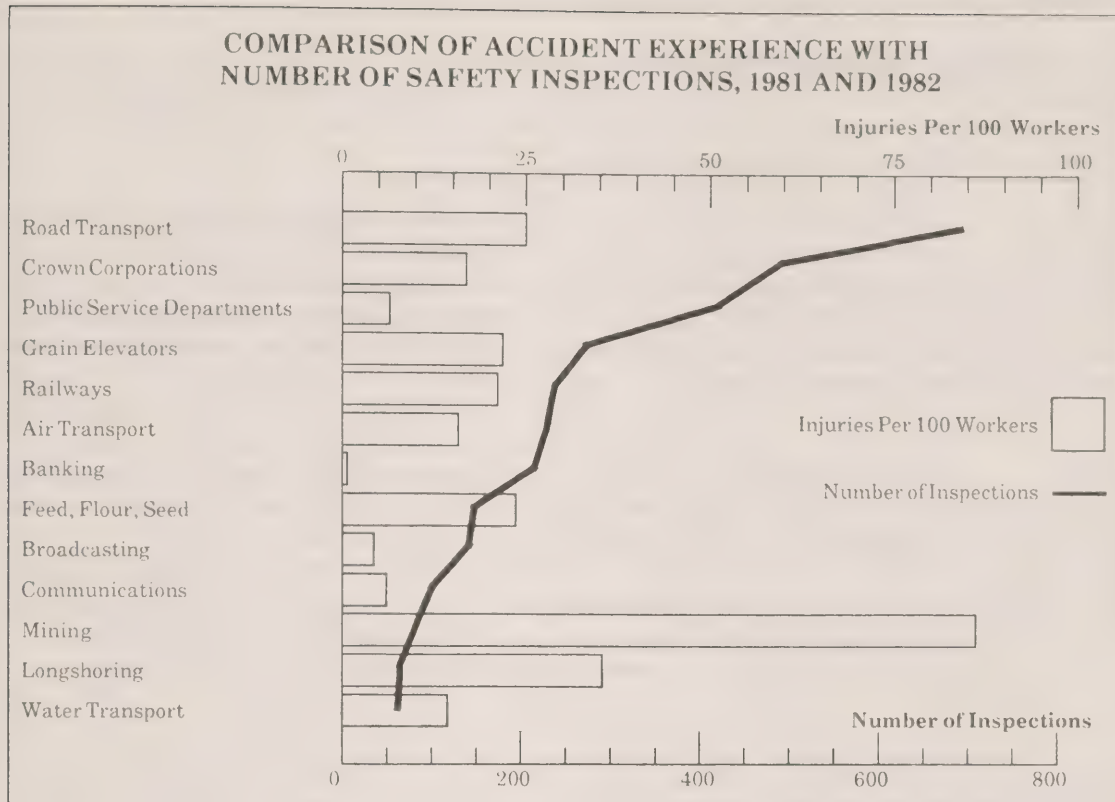
11.19 In delivering the Occupational Safety and Health and the Conditions of Work programs, Regional Operations responds to all complaints about unsafe conditions and failure to meet minimum standards and inspects workplaces to determine whether they are safe. It also ensures that workers are receiving minimum benefits and counsels employers and employees on requirements of the legislation.

11.20 Managers need information on the nature and types of program activities, outputs and results to plan and control their work. In the case of Regional Operations, we found key aspects of this information to be inadequate:

- A record of the establishments that fall within its jurisdiction is necessary to ensure that they are subject to inspection. This information was incomplete in the regions we audited. For example, the list of companies in key industries, such as air transport and interprovincial trucking, had omissions of at least 25 to 30 per cent. We found that other, more stable industries had lower omission rates.
- Information on the record of each establishment, such as serious compliance violations, accident rates and incidence of occupational illness, was incomplete, out of date or not recorded. Such information would be useful in monitoring and in setting priorities.
- A record of the level and type of activities carried out in each establishment and industry is required for an understanding of where the program's resources have been used. It is also basic information for planning activities. This information was inaccurate and was not standardized from region to region.
- Information on the results of program activities, such as the degree to which accident frequency and severity have been reduced, was either out of date or not collected. This information would be useful in allocating resources and in assessing the impact of Regional Operations' efforts.

11.21 As a consequence of not having adequate information, management cannot ensure that it is operating its programs in the most cost-effective manner. An example of information that is needed in the planning process is an analysis of the relationship between inspection efforts and the number of accidents for each industry. Exhibit 11.2 illustrates that, in a number of industries, there is not a direct relationship between inspection effort and accident rates. The banking industry had the lowest accident rate in the federal jurisdiction, yet six other industries received less inspection effort. Other types of comparisons can be made between accident experience and inspections. For example, focusing on the number of accidents, workers in the communications industry suffered three times the injuries of those in broadcasting; however, fewer inspections were conducted in communications. In the absence of any analysis to support such anomalies, it appears that resources spent on enforcing Occupational Safety and Health legislation were not allocated to those industries that represent the greatest potential hazard and provide the greatest opportunity to improve conditions.

Exhibit 11.2



11.22 The information necessary to plan and control Regional Operations should be collected, kept up to date and used to ensure that regional resources are allocated in the most cost-effective manner.

Department's response: The Department agrees.

Program Objectives

11.23 We noted that operational objectives for the programs administered by Regional Operations were stated in terms of outputs or units of work, such as the number of inspections to be carried out, rather than in terms of the results or benefits to be achieved. A review of practices in other jurisdictions indicates that objectives can readily be specified in terms of expected effects on clients, such as reduced accident rates or increased levels of compliance. Such results-oriented objectives would assist managers in planning and carrying out their work and in establishing accountability for achieving desired benefits from resources used.

11.24 The Department should develop results-oriented objectives for the Occupational Safety and Health and the Conditions of Work programs and should use them to plan and control the delivery of the programs.

Department's response: The Department agrees.

Alternative Methods of Program Delivery

11.25 Although the Department employs alternative methods of ensuring compliance with safety, health and labour standards, the costs and benefits of these alternatives have not been explicitly considered. Alternatives include encouraging industry and labour to self-regulate and emphasizing prosecutions. Without explicit consideration of the appropriate mix of strategies, the Department cannot be assured that it is using the most cost-effective enforcement policies.

11.26 The Department should consider alternative enforcement strategies for ensuring compliance with safety and health and labour standards, assess their costs and benefits, and adopt those that would improve compliance.

Department's response: The Department agrees and is currently reviewing the monitoring, compliance and enforcement policies and procedures with a view to determining more appropriate regulatory sanctions as well as sanctions through the courts.

Follow-up

11.27 The Department did not regularly carry out follow-up visits after finding safety violations that represented serious hazards to workers. In our opinion, timely follow-up visits are necessary to determine whether or not serious violations have been corrected. The need to ensure compliance with the law has been demonstrated by two Commissions of Inquiry formed after major disasters. We found that, since that time, the Department had made major improvements in carrying out inspections, although it had done very little in following up on corrective action after identifying serious violations.

11.28 The Department should carry out more regular and timely follow-up visits to ensure that serious safety violations have been corrected.

Department's response: The Department agrees.

Mediation and Conciliation

11.29 The objective of the Federal Mediation and Conciliation Service (FMCS) is to prevent or settle collective bargaining disputes in jurisdictions governed by the Canada Labour Code (Part V). The primary activity of the Service is to provide third-party conciliation and mediation when labour and management have not been able to come to an

agreement. These activities are important because preventing work stoppages in industries, such as rail or air transportation, can significantly affect the economy of Canada.

11.30 Our preliminary review did not indicate any serious management deficiencies. Nonetheless, because of the significant impact of FMCS activities, we reviewed the method of measuring and reporting the effectiveness of the program.

Effectiveness Indicators

11.31 As its indicator of effectiveness, the Service reports the proportion of all referred cases that are settled without a work stoppage. This indicator is similar to that used in other jurisdictions with the same mandate. Our review indicated that the reported values were in a reasonable range for this kind of service. However, reporting only the proportion of cases ending without work stoppage does not give Parliament an appreciation of the size or the significance of the bargaining units involved.

11.32 Information reported to Parliament on those cases referred to the Federal Mediation and Conciliation Service should be expanded to indicate the significance of the cases.

Department's response: The Department agrees.

Administration of the Government Employees Compensation Act

11.33 Labour Canada reimburses provincial Workers' Compensation Boards (WCBs) for compensation paid to federal workers who are injured on the job. Last year, these payments amounted to \$34 million. In addition, \$6 million was paid to Boards for administering these claims. A federal worker who is injured while at work submits his claim to a provincial WCB. The Board certifies the injury as a legitimate work-related injury and then bills the Department. The Department in turn pays the WCB and certifies that the worker is a federal employee. The Department receives about 35,000 new claims a year and processes them manually. This program is carried out by 59 people.

Computerization of Claims Processing

11.34 In 1979, management first formally recognized the need for a computer-based system. However, it was not until 1982 that formal approval was given to study the feasibility of computerization. At 31 March 1983, a draft feasibility study had been approved and work had been done on the system design. In our opinion, the Department could realize significant savings by automating the claims-processing operation. Had the Department initiated action in 1979, our estimates show that it would now be saving at least \$375,000 a year. Departmental officials state that one reason for the delay has been an excessive turnover in staff which we, ourselves, recognize has been a major problem for computer services groups in small departments.

11.35 The Department should consider placing higher priority on automating the claims processing system in order to realize estimated savings as quickly as possible.

Department's response: The Department will review the costing and corresponding savings potential of all alternatives, in the process of reviewing the federal-provincial arrangements for the claims and compensation system as a whole.

Financial Controls

11.36 We found that control over the administration agreements with the Workers' Compensation Boards was not adequate. The agreements with the Boards do not specify which costs are included under administrative expenses. As a result, the Department pays for different types of administrative costs in different provinces, without having an adequate basis for validating the claims. In addition, we noted that the Department had \$400,000 in suspense accounts. Suspense accounts contain items that have been paid on behalf of claimants whose eligibility has not been resolved. Some of the items in the accounts date back to 1978. At the time of our audit, the Department had not resolved the question of the eligibility of these workers, although it is now doing so.

11.37 The Department should clarify administration contracts with Workers' Compensation Boards and ensure prompt resolution of suspense items.

Department's response: The Department agrees. Definitions for administrative costs will be clarified in order to facilitate verification. The Department has reviewed the \$400,000 in suspense accounts, and the balance was reduced to \$84,000, of which \$55,000 was brought to the attention of the appropriate Board, and the real balance of \$29,000 is being vigorously pursued.

Grants and Contributions

Labour Adjustment Benefits Program

11.38 Parliament appropriated \$10.8 million in 1982-83 to provide Labour Canada with funds to assist workers laid off in industries adversely affected by import competition. Labour Canada certifies that groups of workers are potentially eligible to receive benefits. However, the Canada Employment and Immigration Commission (CEIC) determines eligibility for benefits on an individual basis, and makes the payments to those eligible.

11.39 Our audit disclosed that the Department did not have adequate management and financial controls over the expenditures of this program. Although the Department certified groups of individuals as being potentially eligible to receive benefits, it did not obtain a list of people actually receiving benefits or the amounts paid to them. In our opinion, because the funds have been appropriated to Labour Canada, it should be aware of

who is being paid under this program and should ensure that payment is made only to eligible individuals.

11.40 The Department should obtain from the Canada Employment and Immigration Commission the information needed to ensure that payments under the Labour Adjustment Benefits Program are made only to those eligible.

Department's response: The Department agrees and is currently obtaining appropriate information from CEIC.

Labour Education and Quality of Working Life Programs

11.41 We audited the financial controls over two other grant programs, the Labour Education Program and the Quality of Working Life Program, and found only minor weaknesses.

Data Dissemination

11.42 Under the Department of Labour Act, the Department has a mandate to "collect, digest, and publish in suitable form statistical and other information relating to the conditions of labour." These data include information on industries both within and outside the federal jurisdiction, and they cover a wide range of labour issues, including strikes and lockouts, labour organizations, wage rates and benefits and occupational injuries. Two examples of data dissemination activities are the Survey of Wages and Working Conditions and the Occupational Safety and Health Statistics.

Survey of Wages and Working Conditions

11.43 This annual Survey is the only comprehensive source of data on occupational pay rates in Canada. This information has been collected since the turn of the century. The objective of the Survey is to provide accurate, current and relevant data on occupational rates of pay and working conditions. One of the main uses of the Survey is for wage and salary determination in Canadian industry. It is estimated that its cost was \$735,000 in 1982-83.

11.44 We found that the Department had not carried out an in-depth study of whether the survey data were actually needed by users. The last such review took place 10 years ago.

11.45 The Department had no formalized procedures or standards for informing users of either the quality or limitations of the data. The response rate was about 56 per cent and had been declining. It also varied substantially by respondent category (for example, size of reporting unit). Although the Department had a variety of procedures to ensure maximum response rates, it had no procedures or standards for assessing how the response rate

affected the accuracy of the results. Explanatory notes to the tables do not refer to the response rates, giving the impression that the coverage of the Survey is complete. The reader is led to assume that wage rates reported in the tables are accurate when, in fact, errors caused by non-response alone might make them invalid. This would mean that comparisons of wage rates between males and females, for example, or between occupations or communities, could be misleading.

Occupational Safety and Health Statistics

11.46 The Department also collects and publishes accident experience statistics on employees in the federally regulated jurisdiction and on work injuries and fatalities for all jurisdictions. The information is intended to be used for policy formulation and for planning, controlling and evaluating the Occupational Safety and Health Program. As no other comprehensive source of injury data exists, other departments, agencies and the public also use this output. The estimated cost of collecting and compiling Occupational Safety and Health Statistics was \$150,000 in 1982-83.

11.47 The user needs for these data have not been adequately determined. The prime users are the regions, and their needs had not been identified. The public's need has never been assessed.

11.48 The Department did indicate data limitations and response rates for information on occupational injuries. However, lack of a reliable list of all federally regulated industries seriously impaired the Department's ability to ensure that the collection of work injury data from employers was reasonably complete.

11.49 The Department should periodically review user needs for the Survey and Occupational Safety and Health Statistics data and, where appropriate, revise data dissemination activities to meet these needs.

Department's response: The Department agrees and is planning to carry out such a review with respect to the Survey of Wages and Working Conditions within the next year. The Department will utilize the results of this study to revise its data dissemination activities in this area.

11.50 The Department should develop formal standards and procedures for assessing the accuracy of the Survey and Occupational Safety and Health Statistics data and informing users of their quality, limitations and applicability.

Department's response: The Department agrees.

11.51 The Department should ensure that information on the employers in the federally regulated jurisdiction, designed to meet the needs of Regional Operations and other users, is reasonably complete and up to date.

Department's response: *The Department agrees.*

Electronic Data Processing

11.52 Our review focused on the role of senior management in relation to electronic data processing (EDP) systems and how priorities were set for developing EDP systems and acquiring hardware. We found two important deficiencies: the Department had no long-range EDP systems plan in place, and priorities had not been established for EDP systems projects.

11.53 A long-range EDP plan should include an appropriate timetable and priorities for developing new systems and acquiring hardware, the nature and number of staff that will be required and a definition of management's role in decision making. We found no evidence that Labour Canada had formally addressed these considerations.

11.54 Automation of the Government Employees Compensation Act (GECA) administration and the Automated Federal Jurisdiction Universe (AFJU) system provides examples of inadequate planning and control. The need for automating the GECA system was first formally recognized in 1979. It was two years before work was started on the system and, at the time of our audit, only a draft feasibility study had been completed. The first phase of the AFJU system was completed in 1980, but a post-implementation report produced in 1981 and reissued in 1982 stated that the system would not meet user needs and recommended halting any further activity in the system. The Department, however, was still investing time and effort in attempting to up-date this database rather than clarifying user needs.

11.55 Inadequate control over EDP systems development activities can be traced in part to the ineffectiveness of the Data Processing Priorities and Review Committee. The Committee was formed in April 1982 to encourage program managers to exploit data processing techniques and to review and set priorities for all new work. However, it has met only once, to organize.

11.56 There is a pressing need for a priority-setting mechanism. The Department estimated there was a 20 person-year backlog of work. Given the current staff levels, most users could expect to wait at least four years for their problems to be addressed. Meanwhile, inefficient manual systems were being used to process GECA claims and store information on establishments in the federally regulated jurisdiction. In addition, some regions were buying word processors to help process GECA claims.

11.57 The departmental Data Processing Priorities and Review Committee should take a more active role in planning and controlling EDP systems development.

Department's response: The Department agrees and has taken steps to ensure that the Committee will take an active role in planning and controlling EDP systems development.

Program Evaluation

11.58 Program evaluation is an important control mechanism for holding management accountable for achieving program objectives and delivering programs more efficiently. A Program Evaluation Unit has been operating at Labour Canada since 1979. Since that time, the Unit has spent approximately \$160,000 and used at least six person-years. At 31 March 1983, however, the Unit had not produced a complete evaluation report, although one study was in progress. In our opinion, particularly given the resources consumed, Labour Canada has not made satisfactory progress in evaluating departmental programs.

Internal Audit

11.59 The Department's internal audit function is carried out under contract by the Audit Services Bureau of the Department of Supply and Services. We found that internal audit had reported significant inefficiencies in key operations. It made recommendations that, if followed, could have meant considerable savings for the Department. Examples include computerizing and eliminating redundant functions in claims processing for the Government Employees Compensation Program. The Department had not developed an adequate mechanism for ensuring that internal audit recommendations were adequately resolved.

Departmental Expenditure Plan, Part III of the Estimates 1983-84

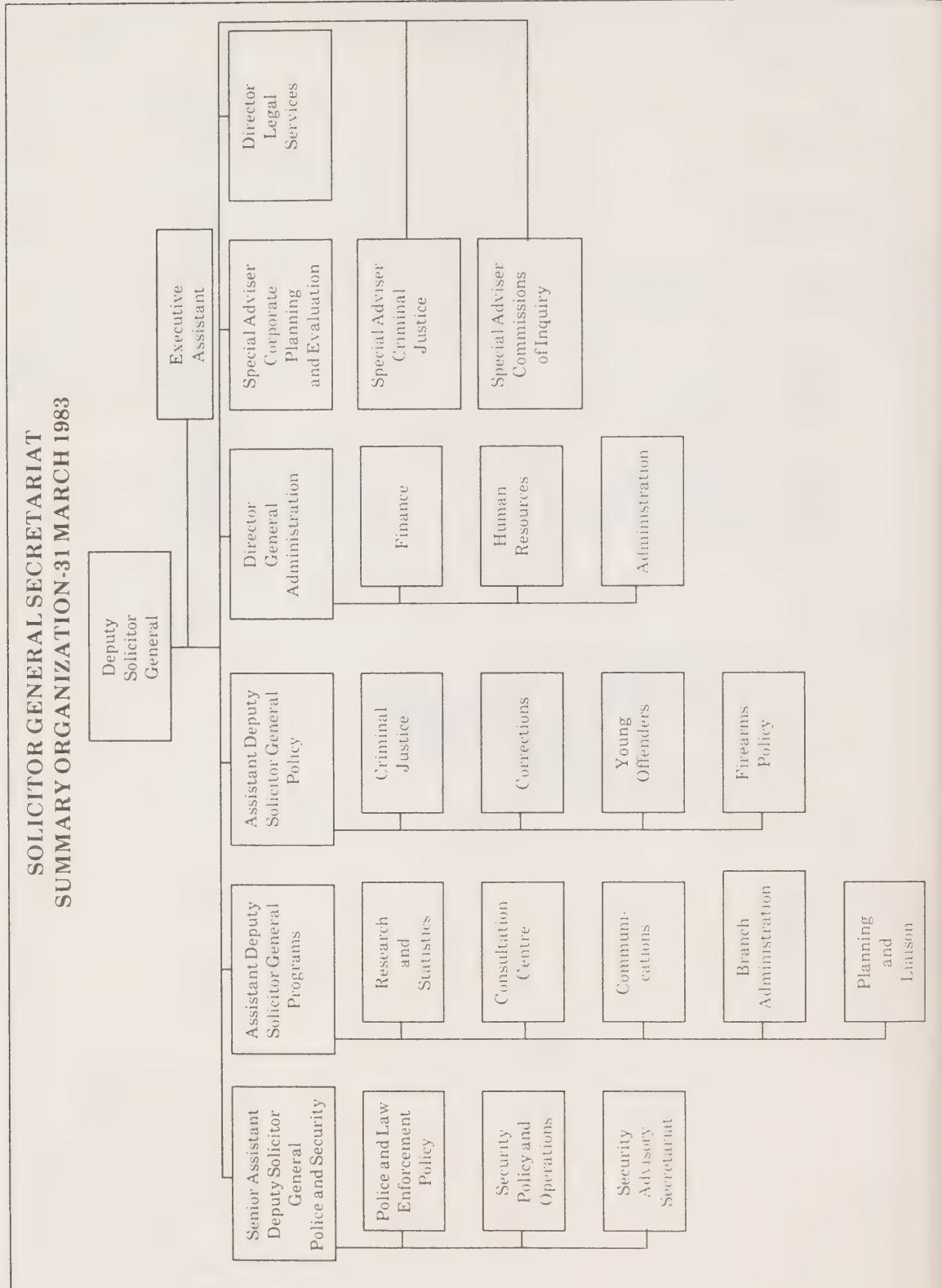
11.60 The Department has prepared an Expenditure Plan. The new form of the Estimates is directed toward improving the government's accountability to Parliament by providing more and better information on programs. Since this was the Department's first attempt to provide such information, we did not audit the Expenditure Plan. However, a number of the recommendations in this chapter will, if carried out, provide the Department with an improved information base for meeting the needs of Members of Parliament.

**SECRETARIAT OF THE DEPARTMENT OF THE
SOLICITOR GENERAL**

SECRETARIAT OF THE SOLICITOR GENERAL

Table of Contents

	Paragraph	Page
SYNOPSIS	12.1	383
Audit Scope	12.11	387
Observations and Recommendations		
Role of the Secretariat	12.15	387
Planning	12.20	388
Program Evaluation	12.31	391
Policy Areas	12.35	392
Programs Branch	12.44	394
Financial Management	12.56	396
Electronic Data Processing	12.57	396
Internal Audit	12.58	396
Exhibits		
12.1 Summary Organization Chart		382
12.2 Volume of Offences and Police, Court and Correctional Expenditures, 1964-1980		384
12.3 Administration of Justice in Canada: Governmental Agencies		385



SECRETARIAT OF THE SOLICITOR GENERAL

SYNOPSIS

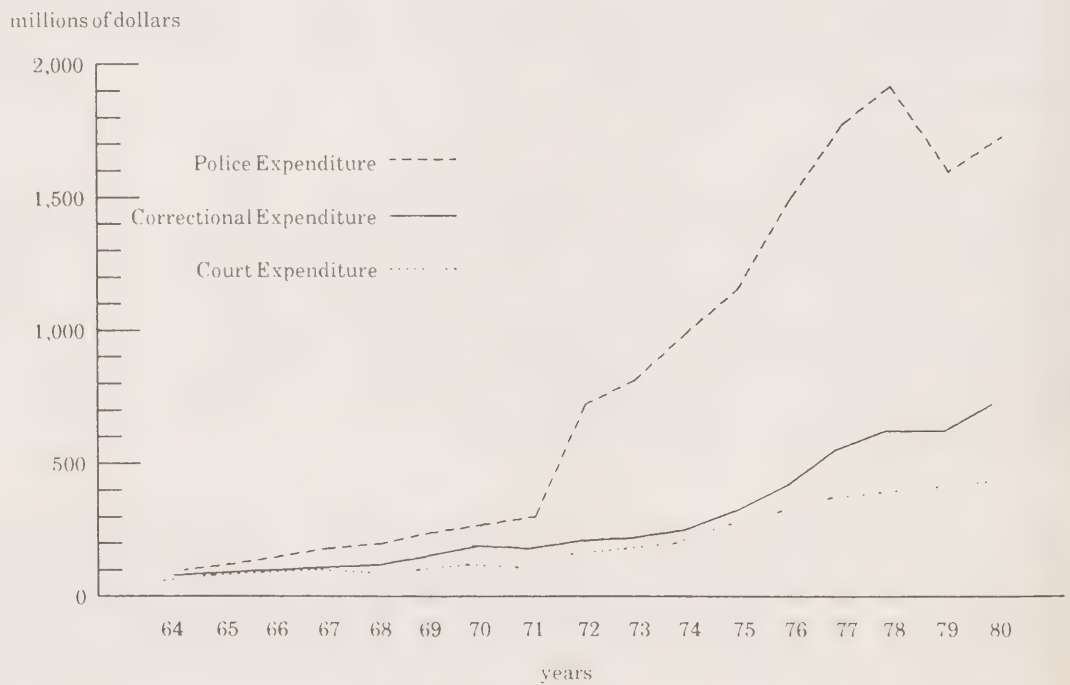
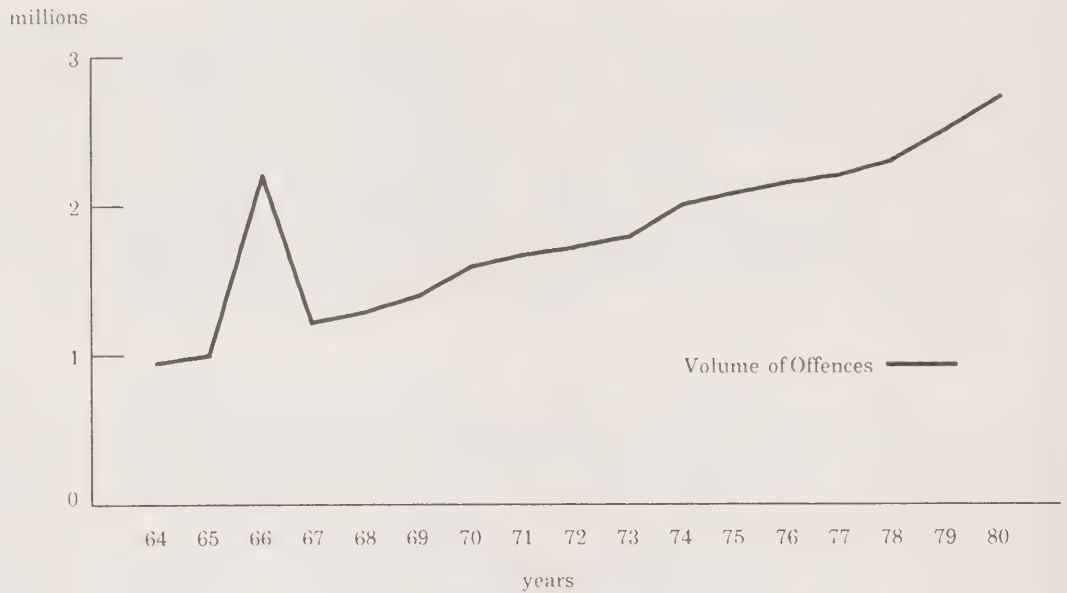
12.1 Since its creation in 1973, a major role of the Secretariat has been to advise the Solicitor General in relation to his statutory responsibilities respecting the mandates and activities of the Royal Canadian Mounted Police, The Correctional Service of Canada and the National Parole Board. The Secretariat has also played a role in promoting improvements in the criminal justice system which suffers from jurisdictional fragmentation and lack of co-ordination. The Secretariat has attempted to improve communication and consultation among the various parties in the system – Department of Justice, provinces, municipalities, international organizations, private sector, etc. – with the objective of promoting equity and cost-effectiveness in administering justice throughout the country.

12.2 Examining the role of the Secretariat, we found there had been some initial uncertainty, both internally and outside, about what role it should play. Should it have a leadership role in improving the criminal justice system in general? Should it act only as a policy adviser for the Minister? Or should it establish some balance between these two roles? This confusion was rooted in the Secretariat's broad mandate, its changing and complex environment and its need to respond to the immediate needs of the Solicitor General. It is only in the last few years that a clearer role for the Secretariat has emerged that encompasses both advice to the Minister and leadership in developing policy initiatives relating to criminal justice and national security issues. Other departments and agencies seem to be in agreement with the role. As well, the Secretariat has started addressing management, planning and control issues.

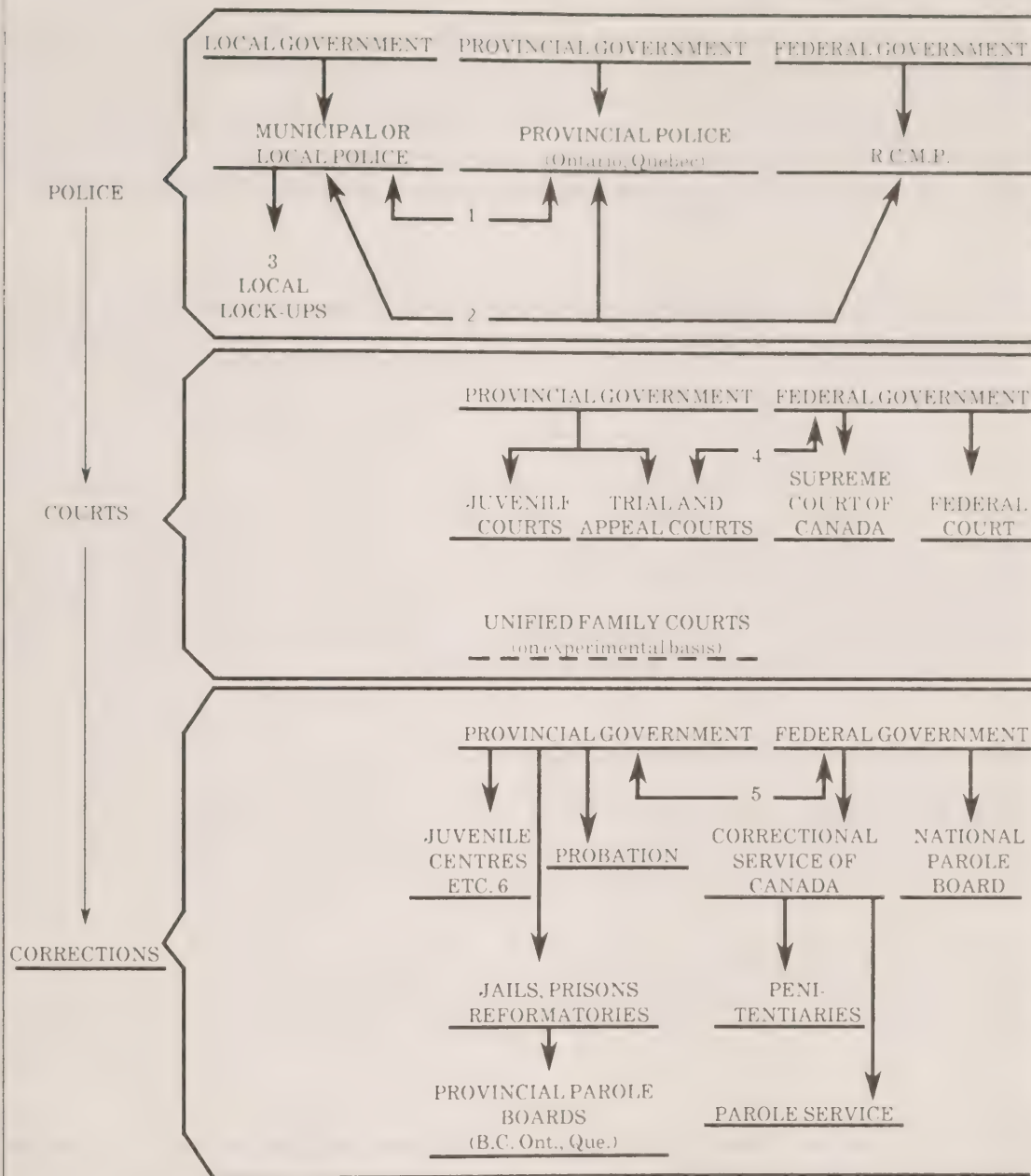
12.3 The Secretariat's 1982-83 budget was \$19 million, and it had 262 authorized person-years. Exhibit 12.1 shows a summary organization chart. In Part III of its Estimates, the Secretariat refers to a number of factors currently affecting the criminal justice system. These include public concern about rising crimes against persons and property, rapidly escalating costs, increased emphasis on accountability of public institutions, and increased pressure for greater intergovernmental co-operation to reduce duplication of services and co-ordinate efforts. Exhibit 12.2 shows the increasing cost of the criminal justice system and the increasing incidence of crime. Exhibit 12.3 shows the fragmentation of Canada's criminal justice system.

12.4 Until the late 1970s, there was little Secretariat-wide planning and co-ordination of activities. More recently, following internal reviews in 1980 and 1981 and Policy and Expenditure Management System (PEMS) requirements, greater emphasis has been placed on developing a more systematic approach to planning activities. Although longer-term Secretariat goals and shorter-term objectives have recently been developed for

**VOLUME OF OFFENCES AND
POLICE, COURT AND CORRECTIONAL EXPENDITURES
1964-80**



ADMINISTRATION OF JUSTICE IN CANADA: GOVERNMENTAL AGENCIES*



1. Ontario Provincial Police contracts with Ontario municipalities.

2. R.C.M.P. contracts with provinces for provincial and/or municipal policing in all provinces except Quebec and Ontario.

3. In certain provinces (e.g. Alberta) lock-ups are a provincial responsibility.

4. Federal government appoints judges to County (or District) and Superior Courts.

5. Federal-Provincial agreements.

6. Homes, camps, training schools etc.

* Source: Griffiths, Klien, Verdun-Jones, *Criminal Justice in Canada*.
Butterworth & Co. (Canada), 1980.

most of its activities, some objectives need to be more fully developed and translated into programs and projects.

12.5 Strategic overview documents could be improved by showing alternative program strategies with related resource implications for the agencies (the RCMP, the CSC and the NPB), and by providing program evaluation information as required by PEMS. An operational planning process is in place, and both a Multi-year Operational Plan and an annual operational plan are prepared. These plans, however, are based primarily on prior years' resource allocations, revised, until recently at least, only to reflect additional resources required for new activities.

12.6 Although the need for carrying out program evaluation was recognized when the Secretariat was established in 1973, the responsibilities and the means for doing so were never clearly identified. The Secretariat is only now attempting to define how its programs should be evaluated.

12.7 The policy areas in the Secretariat, Policy Branch and the Police and Security Branch have experienced difficulties in achieving an appropriate balance in allocating resources between their dual roles of responding to the immediate concerns of the Minister and developing major policy initiatives. This has been due to a lack of adequate planning and control procedures, as well as a lack of information for assessing workloads and allocating resources. The Secretariat has not had proper work plans setting out activities, budgets, resources and milestones for monitoring progress.

12.8 A great many demonstration projects have been funded by the Secretariat's Consultation Centre since it was established in 1973. In spite of the importance to policy makers of having the results of these projects evaluated, very few project evaluations have been conducted. It was not until January 1982 that a policy was established requiring all projects to be evaluated. This policy has not yet been fully implemented.

12.9 A review by internal auditors indicated a need for performance measurement and reporting with respect to the regional operations of the Consultation Centre, as well as a lack of adequate management and control systems in other divisions of the Programs Branch.

12.10 Our examination of financial management and internal audit functions indicated that the Secretariat was carrying out the activities normally associated with these functions in a satisfactory manner.

Audit Scope

12.11 The comprehensive audit of the Secretariat follows the comprehensive audits of two other departmental agencies, the Royal Canadian Mounted Police (RCMP) and The Correctional Service of Canada (CSC). These were reported in Chapters 9 and 10 of our 1981 annual Report. Thus, all the major entities in the Department of the Solicitor General have now been subjected to a comprehensive audit, with the exception of the National Parole Board. We did, however, conduct an audit of the program evaluation function within the Board this year, the findings from which have been combined with those from similar studies in other departments and agencies and reported in Chapter 3.

12.12 Because of the Secretariat's policy development and analysis role and because of its size, the relative importance of key functions and processes, which are the areas in which we tend to concentrate our audit efforts, differ from those of an operating department or agency. For example, efficiency and economy are not major audit issues within the Secretariat, whereas questions relating to measuring and reporting the effectiveness of its activities are of considerable importance, depending, as they do, on the extent to which its role and objectives have been clearly defined. Thus, a full understanding of the past, present and future role of the Secretariat was a natural beginning for our audit.

12.13 We reviewed the evolution of the Secretariat's role and examined the operations in the Policy, Research and Consultation Centre areas. We also examined the major management processes of planning and program evaluation. These affect all the Secretariat's operations and, in some instances, the other entities in the criminal justice community. We also examined the internal audit, financial management and electronic data processing functions.

12.14 As a result of internal corporate reviews and an internal audit, the Secretariat was making changes in its organizational structure, management processes and information systems at the time of our audit. Where appropriate, we used the results of these internal studies to supplement our own examination.

Observations and Recommendations

Role of the Secretariat

12.15 The Department of the Solicitor General was established in 1966 under the Department of the Solicitor General Act. This Act gave the Solicitor General responsibility for all matters pertaining to the RCMP, reformatories, prisons and penitentiaries, and parole and remissions of sentence which had not, by law, been assigned to any other department. In addition, a Departmental Headquarters was formed to serve as a policy support unit for the Minister. The Departmental Headquarters had difficulty in attempting to exert control over what historically had been autonomous agencies and, as a consequence, the Secretariat was established in 1973. In addition to its advisory role to the Solicitor General, the Secretariat was to serve as an "agent for change" in the criminal justice system

while attempting to improve federal-provincial relations in a jurisdictionally fragmented criminal justice system.

12.16 Between 1973 and 1978, there was some confusion about the Secretariat's role and mandate. At the time the Secretariat was created, the role of the Department of Justice with respect to policy development and analysis under Section 4 of the Department of Justice Act was not well developed. As a result, the Secretariat stepped in to fill a void by dealing with the more general administration of justice policy matters in addition to the specific law enforcement and corrections policy matters related to the different agencies.

12.17 The assumption of this major role soon led to conflict with the Department of Justice which, by the mid-1970s, had also started to assume greater responsibility for justice policy matters. In 1975, with direction from the Prime Minister, the roles and responsibilities of the two Ministers concerned were clarified. A formal Joint Justice Committee was also established to resolve issues of duplication, overlap and conflict. Creative tension between the two Departments was established; the Departments believe that it has a certain amount of merit.

12.18 Since 1978, the role of the Secretariat in enabling the Solicitor General to fulfil his statutory obligations has been strengthened by the creation of a separate Police and Security Branch. Also, with the introduction of PEMS by the Government in 1980, another dimension was added to the Secretariat's role in strategic planning for all entities in the Department of the Solicitor General. The Secretariat appears to have clarified its role and this seems to have been accepted by other departments and agencies. It has now started to identify and address planning, management controls and evaluation issues which had largely remained unresolved.

12.19 Given the small size of the Secretariat compared to the magnitude and complexity of the criminal justice system, it would be unrealistic to expect the Secretariat to assist in resolving successfully all the multitude of issues facing the system. In the past, the Secretariat has demonstrated its ability to address important issues – gun control legislation, young offenders legislation, crime prevention programs, and so on. Because of inherent limitations of size, there remains a need for the Secretariat to ensure that its efforts are concentrated on the most important areas by identifying the major issues confronting the criminal justice system, ranking them in priority and, with the participation of other parties, working to resolve them.

Planning

12.20 In our review of the planning function and processes, we examined both strategic and operational planning in the Secretariat. In addition to its own planning, the Secretariat is responsible for pulling together the Department's Strategic Overview and Multi-year Operational Plans.

12.21 Although some plans were developed in the 1970s, there has, until recently, been little Secretariat-wide planning and co-ordination. For example, in 1976, the Secretariat identified over 100 criminal justice issues in which it was interested. From these, about 20 issues were selected for further work. Responsibilities were assigned and some resources identified. Many of these projects, however, were not completed or did not achieve their objectives. This was due to a number of reasons, including priorities not being identified, problems with staff continuity, lack of workplans with target completion dates and lack of management controls to monitor projects. We note that although many of these issues were identified in 1976 and work was begun then, a number of them are still on the current list of ministry priorities or identified as emerging issues in Part III of the Estimates.

12.22 Following corporate reviews in 1980 and 1981, the Secretariat has given more attention to systematic planning. A Special Adviser on Corporate Planning and Evaluation was appointed in January 1981 and, in November 1982, the Secretariat completed the review and revision of the corporate goals. Current longer-term corporate goals are defined in general terms such as "the development of a more just, equitable and humane criminal justice system that is responsive to public concerns."

12.23 At another level, the Secretariat has started to define shorter-term corporate objectives and translate these into activities and projects to facilitate planning and control. This work is not yet complete. The relationships among the Department's goals, corporate goals and corporate objectives as stated in the Strategic Overview, Corporate Planning Handbook and Part III of the Estimates are not clearly set out.

12.24 In 1980, with the introduction of PEMS, the Secretariat established a process for preparing the Strategic Overview. The agencies are fully involved in this process. Strategic Overviews for 1981-82 and 1982-83 were prepared, with input from all concerned.

12.25 This process has helped the Department in clarifying its role, long-term goals and objectives as well as identifying issues confronting the criminal justice environment. It has not, however, led to any changes being identified or proposed to the existing programs of the Secretariat or the agencies, nor have any alternative programs or policies been proposed for pursuing the objectives that have been identified.

12.26 We also noted that program evaluation information, such as the results of evaluations carried out in the RCMP and CSC, were not included in the strategic overview, as required by the Policy and Expenditure Management System.

12.27 The Department's Strategic Overview should, when appropriate, present alternative programs and policies for achieving the goals and objectives of the agencies as well as the Secretariat and should also include available program evaluation information.

Secretariat's response: It is noted that the Policy and Expenditure Management System Submissions Manual (January 31, 1983) does specify that program alternatives and program evaluation data should be included in the strategic overview. However, the Manual goes on to say, at pp. 12-13, that "Policy Committees establish annual guidelines for the preparation of Strategic Overviews...(and)...may also provide detailed instructions to individual departments and agencies on the content of their Strategic Overviews". The Manual suggests that, where conflicts between specifications of the Manual and those of the Policy Committees' instructions occur, the Policy Committees' instructions are to be followed. It is also noted that the position of the Office of the Comptroller General on this subject appears to be that program evaluation data should only be included in the Strategic Overview where major program/policy changes are contemplated.

The Secretariat will seek direction from the Ministry of State for Social Development to clarify the circumstances under which such information should be provided in future Overviews and will comply with such direction.

12.28 The Secretariat has an operational planning process which leads to the preparation of an annual plan as well as the Multi-year Operational Plan. The plans and process are integrated across the Secretariat and take into account agency and general criminal justice issues. However, operational planning within Branches and Divisions has been deficient. Proper workplans for present and projected activities, which include resource requirements, have not been prepared. Resources identified with Branches and Divisions have been accepted as given and not reassessed or reallocated in line with priorities.

12.29 The Annual Operational Plan and the Multi-year Operational Plan should be based on workplans for the Branches that identify and allocate resources in line with priorities.

Secretariat's response: Agreed. Under the Corporate Planning and Management System, Phase II of which was implemented 1 April 1983, all elements of the Secretariat are required to provide detailed workplans which specify, in addition to a multi-year forecast of human and operating resources: the relationship of the activity or project to Secretariat objectives, long-range goals and other activities; specific outputs that are to be produced and the results these outputs are expected to produce; tasks to be completed and milestones by which progress can be monitored; and the means by which progress and success of the activity or project are to be assessed.

At an Annual Program Review which takes place in the fall of each year, program mandate, long-range goals and short and mid-term objectives are reviewed and major initiatives and ongoing activities are ranked in priority for the next cycle. The Annual and Multi-year Operational Plans will therefore be based on fully developed workplans.

12.30 The Secretariat has written a Corporate Planning Handbook that should be useful to managers in planning and controlling resources. Planning and control will also be improved through the use of data to be provided by a management information system which is still in the early stages of implementation.

Program Evaluation

12.31 When the Secretariat was set up, the Department of the Solicitor General made a commitment to evaluate its programs. It has been unable to define, however, how these programs should be evaluated. Although a Policy, Planning and Program Evaluation Branch was established in the Secretariat in 1973, neither a program evaluation policy nor a program evaluation function was ever developed. This is because the precise mandate for evaluation was not clear in the Secretariat. In 1978, reference to program evaluation was deleted during reorganization, and the function did not exist between 1978 and 1981.

12.32 Since 1981, some progress has been made with the appointment of a Special Adviser on Corporate Planning and Evaluation, review of departmental goals and corporate objectives and development of a management information system which is in the early stages of implementation. During 1981, 1982 and 1983, the Secretariat has also stated its commitment to program evaluation in Part III of the Estimates, in its Annual Reports and in the Main Estimates.

12.33 In summary, then, the Secretariat has not met the 1977 government program evaluation policy or its own commitments to evaluate its programs. It has not developed a plan for carrying out and reporting program evaluations. Although the appointment of the Special Adviser on Corporate Planning and Evaluation is an important first step in remedying this situation, much more needs to be done.

12.34 As required by government policy, the Secretariat should develop a program evaluation policy and a plan for implementing it as soon as possible.

Secretariat's response: Senior management of the Secretariat has recognized the need for greater attention to effectiveness evaluation. Discussions on ways and means to implement program evaluation in the Secretariat have been held with representatives of the Program Evaluation Branch of the Office of the Comptroller General. In the meantime, the essential prerequisites for conducting effectiveness evaluation have been and are being developed and implemented in the Secretariat, including detailed statements of goals and objectives, program descriptions and workplans and essential management information systems.

A Program Evaluation Policy and Long-term Plan have now been developed and are presently being reviewed by senior management, in consultation with the Office of the Comptroller General.

Policy Areas

12.35 We examined the operations of the Policy Branch and the Police and Law Enforcement Directorate of the Police and Security Branch. We also reviewed the relationship between their activities and their stated roles. An internal audit of the Security Policy Division and Security Information and Contingency Plans Division was under way, and we therefore did not carry out additional work in these areas.

12.36 The Policy Branch and the Police and Security Branch have responsibility for policy advice to the Minister with respect to The Correctional Service of Canada, the National Parole Board and the Royal Canadian Mounted Police, as well as for liaising with others involved in the Criminal Justice system. The Policy Branch also co-ordinates the preparation of the Department's Strategic Overview document and both Branches participate in developing and implementing many of the major policy initiatives.

12.37 In 1982-83, the Policy Branch had a budget of \$2 million and 32.5 person-years. The Police and Security Branch had a budget of \$1.4 million and 27.5 person-years, of which 10 were dedicated to the Police and Law Enforcement Directorate.

12.38 Some appreciation of the work done by these Branches can be gained from the following brief description of their activities:

- Activities related to the Minister's immediate concerns. These include writing letters to the public, media, and Members of Parliament; preparing speeches; reviewing and commenting on submissions by the departmental agencies; and responding to other requests of the Minister.
- Activities related to departmental and Secretariat priorities. These include initiating, leading or participating in major policy initiatives such as Criminal Law Review, Conditional Release Study, Young Offenders legislation, and the Federal Role in Law Enforcement.
- Liaison activities. These include liaising with other organizations and bodies at the federal, provincial and municipal levels, in the private sector, in international organizations and bodies, etc.

12.39 Although the two Branches have made improvements in bringing their roles into line with departmental priorities, they have not yet been able to define criteria or establish procedures to ensure an appropriate balance among their various activities. In some units, responding to the immediate concerns of the Minister takes up a significant

proportion of the unit's resources, thereby reducing the resources available to carry out other activities.

12.40 The lack of resources in some units has been cited as a major reason for not giving attention to certain activities. However, in the absence of an information system, data have not been available to assess the workloads of the various policy units relative to Branch and Secretariat priorities.



The Secretariat co-ordinates crime prevention programs throughout all levels of government. These programs are internationally recognized and have been adapted in other countries.

12.41 We also noted that some major initiatives and projects did not have workplans with defined tasks and activities, budgets and resource projections and target completion dates against which to monitor progress. In the absence of approved workplans, it has been easy to divert resources to day-to-day requirements. The impact of this on developing major initiatives and projects such as the Cost of Criminal Justice System project and the Clemency Review and Release Study, has not been measured, although some delays have been attributed to this problem.

12.42 Workplans for policy areas should be prepared, identifying levels of resources dedicated to the major activities carried out in these areas. The resource requirements established for each of these activities should take into account both ongoing workloads and departmental priorities.

12.43 Workplans should also be prepared for all major projects and initiatives and should contain information on activities, tasks, milestones and budgets. These should be used to monitor progress.

Secretariat's response: Workplans, as noted in the response to a previous recommendation, are required to be prepared and maintained for all areas of the Secretariat; these contain the information noted in the recommendation.

In the case of the policy branches, as well as the Programs Branch, these workplans are prepared for both discretionary and non-discretionary activities and projects, to ensure that program priorities for both types of activity are adequately recognized and resourced. In the Police and Security Branch, for example, the 1983-84 total operating budget of \$1.8 million is captured through a series of 24 major activities and 89 projects, for which workplans were filed by 31 March 1983.

It is recognized that some workplans are incomplete or have not been completed to as high a standard as others. This is the first year that such detailed workplanning has been required of managers at all levels and, while some difficulties have been experienced, the workplanning exercise is expected to be completed within a matter of weeks.

Programs Branch

12.44 The Programs Branch is the largest Branch in the Secretariat with an annual budget in 1982-83 of \$11 million and a staff complement of 98. It is involved in policy support activities, such as providing statistics and carrying out research and demonstration projects. Policy development and analysis functions depend on this work. The Branch includes the Research Division, Statistics Division, Consultation Centre, Planning and Liaison Division, Communications Division, and Branch Administration.

12.45 We examined the operations of the Consultation Centre but, for other Divisions in the Programs Branch, we relied on the work of internal auditors who had completed an audit of the Branch in 1982 and reported their findings in January 1983. We also reviewed the study made by the Research Division to evaluate the Gun Control Legislation enacted by Parliament in 1977.

12.46 The Consultation Centre had a budget in 1982-83 of \$5.1 million and 33 person-years. It has a head office in Ottawa and regional offices in Moncton, Montreal, Toronto, Saskatoon and Vancouver. The Centre is the Secretariat's only regionalized component.

12.47 The Consultation Centre plays a unique role within both the Secretariat and the Canadian criminal justice system. Its role is to stimulate improvements in criminal

justice through the process of consultation with provinces and the private sector and the funding of demonstration projects to examine alternatives for the criminal justice system.

12.48 In the 1970s, because of a lack of Secretariat-wide planning procedures, the Consultation Centre carried out its activities without reference to the plans and priorities of other Branches. For example, from 1978 to 1981, the Centre committed approximately 50 per cent of its demonstration project funds to diversion projects at a time when diversion had diminished as a priority in the Policy Branch and the Research Division.

12.49 This situation changed in 1981 when the Secretariat introduced Secretariat-wide strategic and operational planning and when the Programs Branch accepted as its primary role the policy support function in relation to established policy priorities.

12.50 The Consultation Centre has funded hundreds of projects since 1973. By their nature, demonstration projects indicate little to policy makers if they are not evaluated in a credible manner. Despite the large number of projects undertaken, very few have been evaluated. Although the need has been recognized since 1975, the Consultation Centre only established in January 1982 a policy that evaluation must be a component of all demonstration projects. This policy, however, has not been fully implemented. The Centre has also not earmarked resources for these evaluations.

12.51 The Consultation Centre should ensure adherence to its policy that demonstration projects will be funded only if an evaluation component has been clearly identified.

Secretariat's response: The Secretariat accepts the spirit of the recommendation that greater attention should be paid to the evaluation of experimental and demonstration projects, and responsibility to carry out this intent has been assigned to the Research and Statistics Divisions of Programs Branch. The Statistics Division is in the process of enhancing its evaluation capability and, with the Consultation Centre, is experimenting with a regionally-based approach to evaluation. A Project Evaluation Committee, including the Director, Statistics Division (as chairman), the Director, Consultation Centre and the Director, Research Division, has been established to review all Consultation projects and proposals, to assess which should and can be evaluated and to plan the evaluations. The Statistics Division and Consultation Centre are also developing self-evaluation kits to offer alternative mechanisms for evaluation. Care will be taken to ensure that the evaluation policy and plan noted in the response to a previous recommendation recognize the need for the evaluation of these types of projects.

12.52 A recent internal audit review of the Programs Branch, including the Consultation Centre, identified deficiencies in the areas of definition of roles and

responsibilities, performance measurement and project management and control systems. These are now being corrected by the Branch.

12.53 In the Research Division, we reviewed the planning, conduct and the final draft report of the Gun Control Evaluation Study.

12.54 The main strengths of the Gun Control Evaluation were the Secretariat's management of the project, the fact that new and useful data were collected and that the early implementation of the legislation was monitored.

12.55 The main deficiencies were the relatively weak research design, the lack of a final database in which all the information collected could be assembled, kept up to date and subjected to further analysis, and the lack of sufficient clarity in reporting the limitations of the research.

Financial Management

12.56 We reviewed the financial management function and found that it generally conformed with our criteria. We noted some deficiencies, including a lack of workplans, an incomplete financial manual and some overlap of responsibilities with the Programs Branch. The Secretariat was planning corrective action at the time of our audit.

Electronic Data Processing

12.57 In the past, the Secretariat did not have a co-ordinated management process for identifying and meeting its requirements for electronic data processing and other information technology. The needs of the Branches and Divisions were met on an ad hoc basis, and overall costs for these were not clearly identified and controlled. The Secretariat has recently initiated changes designed to meet its needs in this area.

Internal Audit

12.58 Despite its relatively small scale of operations, the Secretariat has established an internal audit function. Internal, financial and comprehensive audits are conducted under contract by the Audit Services Bureau of Supply and Services Canada.

12.59 The internal audit function has been operating in a generally satisfactory manner. Improvements are being made in defining and communicating a clear mandate within the Secretariat, elaborating annual audit plans and ensuring timely reporting of findings and follow-up on implementation.

**DEPARTMENT OF TRANSPORT -
MARINE TRANSPORTATION PROGRAM**

DEPARTMENT OF TRANSPORT - MARINE TRANSPORTATION PROGRAM

Table of Contents

	Paragraph	Page
SYNOPSIS	13.1	401
Audit Scope	13.21	405
Observations and Recommendations		
Level of Service	13.25	405
Fleet Capital Investment Plan	13.31	406
Marine Navigation	13.37	408
General Findings	13.40	408
Fixed Aids	13.46	410
Floating Aids	13.52	412
Electronic Aids	13.61	414
Vessel Traffic Services	13.67	415
Coast Guard Radio Stations	13.71	416
Marine Safety	13.73	417
Analytical Capability	13.77	418
Coast Guard – Ship Safety Operations	13.82	419
Marine Personnel Training	13.86	420
Foreign Flag Vessel Compliance with Canadian Regulations	13.91	421
Foreign Flag Oil Rigs	13.93	421
Search and Rescue	13.94	422
Icebreaking	13.97	422
Eastern Arctic Sea Lift	13.99	422
Fleet Human Resource Management	13.101	423
Training and Development of Ships' Officers	13.104	423
Recruitment, Selection, Training and Retention of Ships' Crews	13.107	424
Vessel Scheduling and Utilization	13.110	425
Departmental Common Services		
Role of the Senior Financial Officer	13.112	425
Internal Audit	13.116	426
Measuring and Reporting Program Effectiveness	13.120	426
Departmental Expenditure Plan	13.123	427
Exhibits		
13.1 Costs and Numbers of Marine Navigation Aids 1982-83		409
13.2 Level of Safety – Fishing Vessels		419

DEPARTMENT OF TRANSPORT - MARINE TRANSPORTATION PROGRAM

SYNOPSIS

13.1 The Department of Transport's Marine Transportation Program involves annual appropriations of over \$640 million. The comprehensive audit of the Program focused on the Canadian Coast Guard, the major organizational unit within the Marine Administration. Activities involving the Crown corporations, such as Canada Ports Corporation, St. Lawrence Seaway Authority and the Pilotage authorities were outside the scope of this examination.

13.2 The Canadian Coast Guard's primary responsibility is to promote the safety and efficiency of marine transportation in Canadian waters. In fulfilling this responsibility, it carries out regulatory duties, operates marine navigation aids, provides icebreaking services and conducts marine search and rescue operations. The Canadian Coast Guard is also involved in other activities, such as pollution containment and clean-up and the annual Eastern Arctic supply operations. To carry out these activities, the Coast Guard employs a fleet of 49 icebreaking and aids vessels, 42 search and rescue vessels and auxiliary support craft.

13.3 The services provided by the Coast Guard to minimize loss of life at sea have evolved over time in response to demands from mariners and the public. Determining the appropriate level of service is complicated by the many different geographic, environmental and climatic conditions involved. Furthermore, the needs of commercial shippers, pleasure boaters and fishermen vary according to the sophistication of on-board navigation equipment and the competence of mariners.

13.4 **Progress in responding to areas of concern.** Over the last decade, many areas requiring improvement have been identified by the Department, central agencies or by public enquiries into marine safety. Our audit highlights areas in which the departmental response has not yet resulted in significant change. In particular we refer to:

- analysing the needs of mariners for services provided by the Coast Guard and defining the appropriate service levels as a prerequisite to justifying requirements for vessels and navigational aids;
- remote monitoring of automated lighthouses and further reduction of personnel levels through unmanned;
- assessing needs and cost-benefits for Vessel Traffic Services; and

training and development of personnel employed in the Coast Guard fleet.

13.5 Levels of service. The Department is spending more than \$525 million on Coast Guard activities to provide a variety of services to mariners. It has neither adequately analysed the needs of mariners for these services nor defined the extent and quality of services to be provided. As a result, the Department's ability to plan and control Coast Guard activities is weakened.

13.6 Cost recovery. Cost recovery is an important requirement of the Department's strategic plan. In 1981, the Department examined the broad implications of adopting a cost-recovery policy for many Coast Guard activities. Cost recovery could have an important influence on demand for marine services and, as a result, on the levels of service. However, we were informed by the Department that the Government has not yet agreed to the implementation of such a policy.

13.7 Fleet Capital Investment Plan. The Department's Fleet Capital Investment Plan outlines a scheduled approach to replacing the fleet. It indicates that approximately \$2.5 billion will be required over 30 years to replace 49 major vessels. Annual funding requirements are based on a target of 4 per cent of the fleet's replacement value. The plan does not include funds for Search and Rescue vessel requirements, which are covered in a separate plan.

13.8 The Department describes the plan as "using a zero-based approach to determine the minimum number of vessels and vessel types necessary to meet requirements." Our concern is that this implies that all fleet-related activities were systematically reviewed to justify vessel requirements, including alternatives for program delivery and definition of levels of service. In fact, the process adopted by the Department assumed that it was appropriate to base its projections on the existing activities of the fleet, reduced by 10 per cent to reflect potential productivity improvements. In our opinion, without defined levels of service, the size and composition of the fleet required by the Coast Guard cannot be adequately related to need.

13.9 We believe that specifying levels of service is a critical step in planning the acquisition of vessels. In addition to incurring a substantial initial capital cost, the Department must continue to spend money on salaries, fuel and maintenance for as long as the ship is in service. We noted that savings are possible in fleet-serviced areas such as lighthouses, buoy checking and maintenance and through improved vessel utilization. If, by defining a level of service and improving efficiency in these areas, the Department found that it could do without certain vessels, it might be appropriate to decommission and not replace them. For each vessel not replaced, the Department would save \$3 million to \$75 million for the capital cost plus annual operating costs which, over the life of the vessel, usually exceed the capital cost.

13.10 Marine navigation. The Coast Guard has made substantial efforts to provide Canadian mariners with an extensive, reliable and safe system of marine navigation. In the last decade, it has extended VHF communications, increased the number of traditional fixed and floating navigation aids, and added improved aids such as Loran C, racons and Vessel Traffic Services (VTS). Marine navigation services are provided free to commercial, fishing and recreational vessels. The cost of providing them was \$250 million in 1982-83 and will increase to over \$300 million in 1983-84.

13.11 We found weaknesses in the Coast Guard's planning, operations and the information used to manage its marine navigation activities. The following paragraphs illustrate where improvements in these areas would permit the Coast Guard to provide either a higher level of service without additional resources or the same level of service for fewer resources.

13.12 The Coast Guard has spent over \$100 million on 12 VTS systems. These were established in response to major marine accidents; there was not a sufficient overall analysis of need or assessment of which ports would benefit most. The Coast Guard has not adequately reviewed the continuing need for each of its 272 lighthouses although, at an average annual operating cost of \$125,000 each, they are the most expensive aids it operates. It has not assessed the impact of adopting improved electronic aids such as radar, Loran-C and racons on the more traditional aids such as lighthouses or radio beacons.

13.13 Cost savings in the range of \$10 million to \$20 million annually are possible if the Coast Guard implements the following improvements in its activities:

- completes the Lighthouse Automation Program started in 1970 but which has, in essence, been put on hold;
- revises its standards for checking and maintaining buoys;
- reassesses the continuing need and specific equipment requirements for some of its VTS systems; and
- increases the automation and consolidation of the Coast Guard radio stations.

13.14 In many areas such as buoys and lighthouses, the Department lacks adequate cost information to allow managers to decide whether a given type of aid or a given district is being operated in the most efficient manner.

13.15 Marine safety. Marine safety is best achieved by following a comprehensive and co-ordinated program based on a systematic assessment of risk, and by carrying out an appropriate mix of activities, within resource limits, to minimize the risk.

13.16 Although the Department collects data on the marine accidents it investigates, it does not systematically analyse all these data to monitor relative levels of marine safety by type of traffic and degree of risk. Such analysis could assist the Department in recognizing accident patterns and in planning appropriate and timely action.

13.17 For example, data we obtained from the Coast Guard and the Department of Fisheries and Oceans indicate that the number of accidents involving fishing vessels is increasing at a rate greater than the increase in fishing activity. The Department has not analysed the causes of this trend or determined whether any redirection of effort is required to arrest it.

13.18 Another area requiring improvement is training for marine emergency duties. The Department needs to increase its efforts to assess the preparedness of marine personnel in simulated emergency situations. We noted instances where departmental inspectors concluded that the performance of on-board personnel was less than satisfactory.

13.19 **Fleet human resource management.** A major departmental study in 1975 identified a number of deficiencies in managing human resources in the Coast Guard fleet. Although initiatives were taken and some improvements resulted, many problems remain. For instance, we noted that although priorities for training and development of ships officers have been identified, current progress in these areas is slow.

13.20 If the Coast Guard is to have enough qualified officers and crew, it must accelerate its plans to attract, select and train personnel. If it does not, it runs the risk of staff shortages as demand for trained marine personnel in the private sector increases with economic recovery.

Audit Scope

13.21 The Department of Transport's Marine Transportation Program involves annual appropriations of over \$640 million. It includes the Office of the Marine Administrator, the Canadian Coast Guard, a public ports and harbours component, nine harbour commissions, and eight Crown corporations that operate canals, bridges and a ports system and provide pilotage services.

13.22 The comprehensive audit of the Marine Transportation Program focused on the Canadian Coast Guard, the major organizational unit within the Marine Administration, accounting for \$525 million of the Program expenditures. Activities involving Crown corporations, such as Canada Ports Corporation, St. Lawrence Seaway Authority and the Pilotage authorities were outside the audit scope.

13.23 Our examination covered:

- Marine Navigation and Marine Safety, including how activities are planned and programs are delivered;
- the Fleet Capital Investment Plan, which outlines the Program's long-term fleet requirements;
- the Department's progress in responding to known concerns such as unmanning lighthouses, fleet human resource planning, and the necessity for determining appropriate levels of service for the Coast Guard;
- other program activities in the areas of Icebreaking and the Eastern Arctic Sea Lift; and
- Department-wide services provided to the Program, particularly those provided by the Senior Financial Officer, Internal Audit and Program Evaluation.

13.24 We did not audit the Department's Search and Rescue activities because this area has recently been examined as part of an interdepartmental study ordered by Cabinet. The study made many recommendations on the management and operations of Search and Rescue. The Department informs us that the majority of recommendations are being implemented.

Observations and Recommendations

Level of Service

13.25 "Level of service" is a term that refers to the amount and quality of a given service. Usually the organization that provides a service sets the level according to the perceived needs of those who use it within the resource limits of the organization. In defining an appropriate level, the objective is to choose one that can be justified on the

grounds of demand for the service, while taking into account the costs and benefits of providing it.

13.26 In our opinion, defining a level of service is one of the critical steps in determining the tools (in the Coast Guard's case, the number of ships, personnel, aids, equipment and other materiel and resources) needed to promote a safe, efficient marine transportation system. Because the Department has not defined a level of service for many of its Coast Guard activities, its ability to plan and control these activities is weakened. This chapter highlights examples of the impact of this significant deficiency.

13.27 In 1974, the Treasury Board first asked the Coast Guard to submit a fleet plan which would identify the kinds and scope of services to be provided and the types, numbers and deployment of vessels required to provide those services. Over the years, this request evolved into a requirement that all plans to invest in capital assets beyond 1981-82 would have to be based on clearly defined service levels. Nine years and two extended deadlines have passed, but the Department has yet to meet the requirement of defined levels of service.

13.28 The Department has to some extent tried to define levels of service for its marine activities. However, attempting to meet a variety of needs simultaneously may make the task unnecessarily complex. We believe the Department should concentrate initially on developing standards that will be useful to operating managers in key activities such as icebreaking and aids to navigation. Work conducted in these areas on one activity at a time could produce benefits within a relatively short time. Statements of levels of service that are useful to operating managers will ultimately provide the basis to meet the information needs of the Treasury Board.

13.29 **Cost recovery.** Cost recovery is an important requirement of the Department's strategic plan. For many of the services rendered, the Coast Guard could recover part or all of its costs from users. Such provisions would provide some built-in assurance that those using the service place a value on it that is at least as high as its cost. In 1981, the Department examined the broad implications of adopting a cost recovery policy for Coast Guard activities such as icebreaking, dredging, aids to navigation and Vessel Traffic Services. We were informed by the Department that the Government has not yet agreed to implement such a policy.

13.30 When determining an appropriate level of service for an activity, the Department will need to assess the impact of cost recovery on demand for the service.

Fleet Capital Investment Plan

13.31 The Fleet Capital Investment Plan (FCIP) was developed in 1979. It calls for the orderly replacement of aging vessels over a 30-year period and provides for regular annual expenditures for replacing vessels, rather than spending on a "peak and valley" basis. It is divided into five-year segments, to be updated every three years. This allows the

Department to review the need for a given ship and to consider any technical advances in vessel design. The FCIP covers the replacement of 49 major vessels in the fleet. It excludes those used primarily for Search and Rescue (SAR), which are covered in a separate plan. It recommends limiting the fleet vessels to 9 basic designs, compared with the current 45. The first update of the FCIP was completed in early 1983. Overall fleet replacement cost is now estimated to be \$2.5 billion.

13.32 The FCIP submission noted that it had been "developed using a zero-based approach in determining the minimum number of vessels and vessel types necessary to meet requirements." Our concern is that the Department did not use the normal zero-based approach; it requires two steps that the Department did not take. First, the Department would have had to review the need for all activities involving the fleet and consider alternative methods for program delivery. Second, to determine the number and type of vessels needed it would have had to both specify and justify the level of service it would provide. Instead, the Department based its submission on existing ship-day requirements by type of vessel plus projected increases in demand for certain types of services, such as those generated by growing activity in off-shore oil exploration. Total existing ship-day requirements were then reduced by 10 per cent to reflect potential productivity improvements related to the design of new vessels. Thus the Department has not adequately related the size and composition of its fleet to the need for its services.

13.33 We noted that when Cabinet approved the FCIP in principle late in 1979, it did so subject to the Coast Guard specifying levels of service "before the end of 1981". The Department did not meet the deadline. Nevertheless, it has received Treasury Board approval of \$150 million to build two Navaid/Light Icebreakers. Furthermore, under the Special Recovery Capital Projects Program announced in the April 1983 Budget, the Coast Guard received approval for an early start on construction of these and nine other vessels. The total estimated cost of these 11 vessels is \$780 million.

13.34 We believe that specifying levels of service is a critical step in planning the acquisition of any major capital asset. For an asset such as a ship, this step is particularly important because of the downstream costs that occur over the life of the asset. For example, in addition to the substantial initial capital cost, the Department must continue to spend money on salaries, fuel and maintenance for as long as the ship is in service. In our opinion, an asset should normally be acquired to provide a specified level of service to satisfy a defined need cost-effectively. Otherwise, the asset may be used just because it is there, and substantial operating costs will be incurred unnecessarily.

13.35 In the current FCIP update, the Department states that the lack of defined levels of service does not affect its current priorities for replacing vessels because every vessel to be acquired over the next five years is an essential part of the "core" fleet. The Department proposes to decommission any vessels then deemed non-essential. The Department told us that it recognizes the importance of identifying non-essential vessels as early as possible and minimizing the risk that the wrong kinds of vessels may be acquired. This risk will be carefully re-examined in the next update to the FCIP.

13.36 In later sections of this chapter, relating to lighthouses and buoy checking and maintenance, we suggest that reduction in the size of the fleet may be possible. In addition, vessel utilization (particularly on weekends) could be improved through alternative scheduling systems to the point of requiring fewer vessels. If, by defining the levels of service and reducing its vessel needs through the efficiency improvements mentioned, the Department found that it could do without certain vessels, it might be appropriate to decommission them immediately and not replace them. For each ship not replaced, the Department would save the capital cost of \$3 million to \$75 million and also annual operating costs which, over a 30-year life of a vessel, usually exceed the capital cost.

Marine Navigation

13.37 The Coast Guard has made substantial efforts to provide Canadian mariners with an extensive, reliable and safe system of marine navigation. Over the last decade, the Coast Guard has improved VHF communications, increased the numbers of traditional floating and fixed navigation aids and added improved aids such as Loran-C, racons (radar transponder devices), and Vessel Traffic Services. Marine navigation services are provided free to commercial, fishing and recreational vessels. The cost of providing these services was \$250 million in 1982-83 and will increase to over \$300 million in 1983-84. Exhibit 13.1 shows the costs and numbers of the different types of aids.

13.38 The Coast Guard has increased the number and diversity of the aids it offers to navigation. Although it has continued to improve electronic aids, it spends \$150 million of the \$250 million total on more traditional aids like buoys and lighthouses. This has come at a time when the availability, cost and accuracy of on-board electronic aids have made it increasingly possible for mariners themselves to acquire such equipment and thus increase their safety.

13.39 There are a number of serious weaknesses in planning, operations and management information. If the Coast Guard were to resolve these weaknesses, it could provide either a higher level of safety without additional resources or the same level for substantially fewer resources.

General Findings

13.40 The Coast Guard has thoroughly examined the needs of commercial users but has not adequately analysed those of the fishing and recreational users. For example, it has not determined what on-board electronic navigation equipment these two groups carry. Furthermore, it has not analysed the long-term trend for the use of such equipment or determined how it affects the way traditional aids, such as lighthouses and buoys, are being used.

13.41 The Coast Guard has not determined levels of service either for its activities as a whole or for individual systems such as buoys. For example, it has not specified how reliable a buoy should be (whether it is in position and functioning), or what mixture of aids

COSTS AND NUMBERS OF MARINE NAVIGATION AIDS 1982-83

Type of Aid	Capital and Operating Expenditures*	Number
1. Fixed Aids		234 Manned 38 Unmanned
- Lighthouses	\$ 49 M	
- Foghorns		384
- Shore Lights	\$ 20 M	3,802
- Day Beacons		2,498
2. Floating Aids	\$ 80 M	
- Lighted Buoys		2,779
- Unlighted Buoys		10,803
- Stakes / Bushes		2,330
3. Electronic Aids	\$ 19 M	
- Loran-C		4
- Racons		64
- Radio Beacons		151
4. Vessel Traffic Service	\$ 20 M	
- VTS Systems		12
- Regulatory System		2
5. Radio Stations	\$ 37 M	
- Manned		49
- Peripheral		50
6. Other	\$ 29 M	
- Ice Information		
- Publications		
- Canals		
- Soundings		
Total	\$ 254 M*	

* Estimated by the Coast Guard and based on forecast expenditures for 1982 - 83.

overall would provide the defined level of service. The answers to these questions are critical if the Coast Guard is to determine the appropriate number and type of aids, the operating standards and the number of persons and vessels needed to operate the system.

13.42 The Coast Guard has done little analysis of what is an appropriate mix of aids. As a new type of aid is introduced, or improvements are made to existing types, there is a need to assess the impact on the aids already in place to avoid the risk of duplication or overlap. At present, districts and regions which are adding new types of aids and, at times, increasing the number of more traditional aids are doing so without defined standards. Coupled with local public pressures that discourage removal of any existing aids, the result is that new types are layered on existing ones.

13.43 A number of improvements in the operation of marine aids could produce annual savings in the range of \$10 million to \$20 million. For example, the unmanning of lighthouses could save more than \$10 million a year. Changes in the standards and approach to checking and maintaining buoys could generate considerable savings without affecting the level of service. Reassessing need for and extent of existing Vessel Traffic Services systems and automating and consolidating radio stations could also generate sizeable savings.

13.44 The Coast Guard lacks adequate information on the cost of many of its operations. For example, its present cost accounting system does not identify costs separately for fixed and floating aids. It has inadequate data on buoy checking and maintenance costs and no breakdown of costs for manned and unmanned lighthouses. Without this information, the Coast Guard cannot assess the cost effectiveness of either a given type of aid or the operations of a given district. This weakness, coupled with a lack of analysis of user needs, increases the difficulty of detecting, on an ongoing basis, aids that are no longer cost-effective.

13.45 The following sections cover specific findings for each of the major marine navigation systems.

Fixed Aids

13.46 The Coast Guard operates more than 6,000 fixed aids, such as lighthouses, day beacons, fog signals, sector lights and range lights. In 1982-83, the Coast Guard estimated it spent \$70 million on fixed aids. Of this, approximately 70 per cent relates to the 272 lighthouses. Average annual operating costs are \$125,000 each. A lighthouse is the most expensive individual aid the Coast Guard provides.



Manned lighthouse has been replaced by automated lightstation, saving the Department an estimated \$50,000 annually in direct costs.

13.47 In 1970, the Coast Guard set out on the first phase of a program to automate, unman and remotely monitor its manned lighthouses. In 1978, our annual Report noted that equipment acceptance and organization problems had led to a six-year delay in completing the automation stage and that some lighthouses had still not been automated. In a departmental review of the program in 1981, one major shortcoming cited was the lack of analysis of the continuing need for lighthouses. For example, as more vessels turn to electronic position fixing, the purpose of lighthouses must be re-examined. If a lighthouse is simply being used as a backup at an average operating cost of \$125,000 a year, this raises the question of its cost-effectiveness.

13.48 In 1982, the Coast Guard again attempted to determine how to reduce the number of people manning lighthouses. Each of the 272 lighthouses is now automated and can function unattended; however, 234 of them are still manned. To assess the need for manned locations, Headquarters asked each region to justify the continued manning. Directives issued to the regions noted that: "Based on fault reports submitted thus far, the present automatic operation of the lightstations is giving an adequate level of service to the mariner (frequency of outages, lengths of outages, etc.)". The regions have identified 118 stations that could be unmanned. Headquarters is reviewing the results and has indicated that the number to be unmanned should be higher.

13.49 Despite the fact that the unmanning program has been under way for 13 years, we had difficulty obtaining satisfactory cost information. A breakdown of direct and indirect costs for manned versus unmanned lighthouses is not available. Nevertheless, the Coast Guard has indicated that an estimate of annual cost savings of \$50,000 per station would be reasonable. Thus, unmanning lightstations would result in annual savings of from \$6 million (based on the 118 lighthouses identified in the survey) to \$12 million (if all 234 manned locations were included). Offsetting these annual reductions in costs is a one-time cost for new monitoring equipment, which the Coast Guard estimates would range from \$8 million to \$15 million.

13.50 These savings do not reflect possible reductions in the ship and helicopter fleet. Manned lighthouses now generate 10 to 15 per cent of the need for ship-days and an even larger percentage of the need for helicopters. Thus, unmanning them could generate substantial additional savings through the reduction in the fleet itself.

13.51 The Coast Guard should determine which lighthouses are to be unmanned and develop a timetable to accomplish this.

Department's response: The Department responds that it agrees, and the Coast Guard will continue with this program and determine the lighthouses which can be unmanned. A program for implementation will then be undertaken, including prerequisite financial resources for inclusion in departmental Main Estimates.

Floating Aids

13.52 Between 1971 and 1981, the Coast Guard increased the number of its buoys by adding 343 lighted buoys (14 per cent) and 2,593 unlighted buoys (32 per cent). There are now more than 15,000 buoys in Canadian waters. Estimated expenditures for floating aids in 1982-83 were \$80 million. Buoys are used to warn vessels of hazards such as rocks or shoals, to mark navigable channels, to indicate harbour entrances and to mark anchorage areas. They are relatively inexpensive to purchase and can last for many years; the major expense is in operating the vessels that position, check and remove them. Coast Guard employs a fleet of 42 aids tenders at an annual operating cost in excess of \$50 million. This does not include any portion of the capital cost of the vessels which ranges from \$3 million to \$75 million a vessel.

13.53 The Coast Guard Headquarters has not developed any guidelines on where to install buoys and what type to install. Regions and districts make the decision based on their own judgement, local practices and the resources available. As a result, amounts and types of buoys vary considerably from one district or region to another – a variation over and above what environmental conditions dictate.

13.54 We found the same wide variations in the frequency of checking and maintaining buoys. The Coast Guard schedule for checking these aids indicates that they

are to be checked for reliability every four months, except in confined waterways, where they are to be checked every two months. However, we could find no analysis of risk on which the checking schedule had been established. There was also no reliability standard.

13.55 We found that more frequent checking appears to have only a limited effect on reliability. In one district that checked buoys every four months, buoys were on position and functioning 96 per cent of the time. In another district, with buoys checked every two months because they were in confined waterways, we noted that the reliability was 99 per cent. In districts which did not meet the schedule, where checking took place at intervals of anywhere from 4 to 12 months, the reliability of the buoys was comparable to those being checked more often. Since the cost of operating a large aids tender can be in excess of \$10,000 a day (excluding the capital cost of the vessel), reducing the frequency of checking could result in saving millions of dollars and would not appear to affect the overall level of safety. By way of comparison, the United States checks buoys once every 12 months; a period of up to 8 months between checks is allowed in the United Kingdom. We understand that the Coast Guard has begun a study to review the checking schedule.

13.56 Large aids tenders are expensive to build and operate. We noted situations where the Coast Guard was using small craft to check aids in some districts. For example, in one district, a 20-metre vessel with a five man crew and an average operating cost of \$1,000 a day has replaced a larger aid vessel.

13.57 Similarly, some districts have made extensive use of Search and Rescue vessels and hovercraft to check floating aids. This work, if properly scheduled, does not interfere with the primary role of responding to distress calls. Since these vessels are already on station, the only additional cost is the fuel consumed. We noted variations in the extent to which regions used SAR vessels to carry out this secondary role. In 1982-83, SAR vessels logged more than 1,800 hours on aids checking, over half of which was done by one of the five Coast Guard regions. Using the average cost of the aids tender versus an SAR vessel, we estimated the Coast Guard has reduced its operating costs by \$1 million annually. We believe that further emphasis could be placed on using SAR vessels, where appropriate, to carry out tasks related to floating aids.

13.58 Coast Guard instructions for painting buoys specify how a buoy is to be painted, but do not specify how often. Different districts follow different procedures. These range from returning every buoy to shore for sandblasting and painting annually, to annual touch-up coats on board vessels with a return to land every six years. In comparison, the United States paints buoys every six years, and the United Kingdom paints them every four years. We also found a wide variation in the replacement of chains used to anchor buoys. Some districts change all moorings every year, some every second year and others only after four years, and then only if required. By comparison, the United Kingdom changes moorings every four years. Because the Coast Guard does not have adequate information on the maintenance costs of buoys, we could not estimate potential savings. Nevertheless, any change in painting and mooring practices that would result in a reduction in ship operation could save millions of dollars annually.

13.59 As indicated earlier for fixed aids, the Coast Guard also has inadequate cost information for managing floating aids. Another weakness that applies to all types of aids is the lack of a systematic review of the continuing need for each type of aid. Although some districts have instituted a cyclical review process, it is mainly directed at conventional aids – the aids that are installed and operated at district levels. There are no guidelines on what an appropriate mixture of aids should be. Such a review needs to cover all types of aids and their effect on the whole marine navigation system.

13.60 The Coast Guard should:

- **develop comprehensive guidelines for the installation of buoys;**
- **where appropriate, revise its checking and maintenance standards;**
- **improve its cost information on aids; and**
- **extend its cyclical review process to all aids.**

Department's response: The Department agrees with the recommendation, and notes that:

- *Action will be initiated on development of comprehensive guidelines for the installation of buoys by early 1984.*
- *Revised checking and maintenance standards have been developed and are currently under review. The new standards are scheduled for implementation by the fall of 1984.*
- *Implementation of the recently developed departmental Automated Cost Accounting System will provide Coast Guard with the information required to cost its operations.*
- *Coast Guard will, during 1984, review the existing local cyclical review process and develop a national review policy.*

Electronic Aids

13.61 In 1982-83, the Coast Guard estimated it spent \$19 million on electronic aids. Technology is having a significant impact on marine navigation. In the past, the Coast Guard operated a variety of position-fixing aids such as Loran-A, Decca and radio beacons. All these suffered from one or more limitations – lack of reliability, accuracy or geographic coverage. Today, aids such as Loran-C and racons, and on-board electronic aids such as radar or depth finders, have made it possible for mariners to navigate more safely and expeditiously in all weather conditions.

13.62 Loran-C is a highly accurate long-range position fixing system. It offers a wider coverage on both coasts than the systems it replaced and has a reliability of over 99

per cent. Accuracy is limited to one-quarter mile because of the limitations of charting, but the system itself can return a fisherman to within 100 feet of where he set his nets. Loran-C was established in Canada after a detailed review of alternatives. Coverage is currently being expanded. To help mariners convert to the new system, the Coast Guard developed an appropriate information program, held public seminars and conducted demonstrations.

13.63 Racons are devices which, when activated by a ship's radar, send back a return signal that is visible on the radar receiver. The racon, which can be located on a buoy or on land, has a range of about 20 nautical miles. It is very reliable and is an excellent all-weather aid, marking hazards for radar-equipped vessels navigating in confined and open water.

13.64 Radio beacons, which have been in operation for 50 years, enable vessels to fix their position. Although commercial vessels do not use them because more accurate systems are available, recreational boaters do because of the low cost of the receiver.

13.65 We found that the Coast Guard has not determined the extent to which fishing and recreational vessels are using electronic aids. Nor has it determined how the use of electronic navigation equipment might affect the need for more traditional aids such as lighthouses. Increased use of aids such as Loran-C and radar will influence mariners' needs for conventional aids.

13.66 The Coast Guard should assess the impact of electronic aids on the need for traditional aids such as lighthouses.

Department's response: The Department agrees with this recommendation and will establish this process as part of the cyclical review policy of all aids.

Vessel Traffic Services

13.67 Vessel Traffic Services (VTS) systems are designed to facilitate the safe movement of commercial vessels in congested waters. The technology employed is similar to that used in air traffic control. There are currently 12 sites across Canada with varying capabilities. Vancouver and Tofino, B.C. have the most sophisticated installations, incorporating advanced surveillance systems, automated trackers, and collision avoidance software. Others, such as Sarnia, Ontario and St. John's, Newfoundland, have radio communications but no radar surveillance.

13.68 The Coast Guard has consistently failed to develop an analytical framework for VTS systems including:

- assessing the need;
- identifying costs and benefits;

determining the most suitable equipment configuration – radar or just radio;
and

setting priorities for determining where they might be installed.

The need for such a framework was noted in a Marine Administration study in 1973, and was reiterated by Treasury Board in 1975. The same observation was raised in our 1978 Report and corroborated by a departmental review in 1979. Nevertheless, the Coast Guard only undertook production of such a framework in 1980 and set a completion date of mid-1983. In the intervening years, the Coast Guard has spent over \$100 million on 12 VTS systems. These were generally established in response to marine accidents, without sufficient overall analysis of need or assessment of which ports could benefit most.

13.69 There have been a number of significant inconsistencies in approach. For example, we noted that radar-equipped systems are in operation in Placentia Bay, Newfoundland, and Eddy Point, Nova Scotia, where traffic levels are very low and high-risk tanker traffic has either not materialized or has diminished from original projections. On the other hand, the St. Clair and Detroit Rivers, which handle many times the traffic of Eddy Point and as much as the radar-equipped Montreal VTS, have only radio capability.

13.70 The Coast Guard should review the continuing needs for VTS systems and specific equipment requirements of existing VTS systems.

Department's response: The Department responds that this will be undertaken following receipt and assessment of the Bureau of Management Consulting report on VTS services in Canada which is scheduled for completion in 1983.

Coast Guard Radio Stations

13.71 There are 50 manned Coast Guard radio stations (CGRS) in Canada and 49 peripheral facilities (unmanned sites that extend the range of the main stations). The principal task of CGRS is to answer marine distress calls. In addition to maintaining this safety watch, CGRS also provides:

- continuous weather broadcasts;
- ice information;
- command and control communications for the Coast Guard fleet; and
- cost recoverable public communications services (ship-to-shore connections to the public telephone system, etc.).

The total cost in 1982-83 was approximately \$37 million.

13.72 Although our review did not indicate any inadequacies in the service provided, CGRS has been slow to use available technology that would lead to significant improvements in efficiency. It has recognized this problem and has just completed a major study that assesses significant trends in communication technology and their impact on the Coast Guard.

Marine Safety

13.73 The main objective of the Marine Transportation Program relates to promoting "a safe and efficient national marine transportation system." Four units within the Canadian Coast Guard are most closely associated with this area:

Ship Safety Branch: This Branch's responsibilities include developing regulations and standards, inspecting ships, ships' equipment and cargoes, and certifying officers and crews, to ensure compliance with Canadian legislation and with international conventions to which Canada is a party.

Casualty Investigations Division: This Division investigates accidents involving commercial and fishing vessels and their crews.

Emergencies Branch: This Branch is involved in preparation for handling marine pollution and other emergencies.

Search and Rescue Branch: The Branch carries out marine search and rescue work in conjunction with the Department of National Defence and is also involved in educational activities to promote safe practices for recreational boating. Because SAR has been the subject of a number of recent studies, we did not look at its operations in detail.

13.74 The Department is faced with a continuing demand for a greater level of marine safety. It must react to public pressures which inevitably follow marine disasters. For example, in 1979, a fire aboard the *Cartiercliffe Hall* claimed seven lives. In 1981, another seven lives were lost in the *Hudson Transport* incident. In both cases, public enquiries produced numerous recommendations to which the Department is responding.

13.75 Larger and more complex vessels and expanding oil exploration activity off Canada's shores have also posed new challenges for the Department. Moreover, the extension of the fishing limits to 200 miles in 1977 and the growing popularity of recreational boating have added to the demand for services.

13.76 Marine safety is best achieved by following a comprehensive and co-ordinated program based on a systematic and objective assessment of risk, and by carrying out an appropriate mix of activities, within resource limits, to minimize the risk. These include developing legislation and regulations, inspecting vessels, licensing and certification, training, safety promotion and education, providing navigational aids and search and rescue operations. Objective risk assessments, coupled with managerial judgement and experience,

assist in evaluating alternatives to achieve improved levels of safety. An analytical approach to risk assessment is well established in other modes of transportation and has been endorsed by the marine community.

Analytical Capability

13.77 We found that the Department has been collecting certain kinds of safety-related statistics since 1977. For example, it has established a computerized database on marine accidents that contains detailed information on each accident, such as the type and size of vessel involved, country of registry and location and causes of the accident. These statistics could provide the basis for identifying accident trends and recurring circumstances associated with accidents and for estimating benefits of proposed corrective measures. Another benefit would be an improved capacity to respond to external pressures for new initiatives. However, we found that the Department has made little use of these data.

13.78 The Department has not identified accident patterns which could suggest a redirection of efforts to reduce the likelihood of future accidents. It should be noted that, from time to time, accident data have been analysed for specific studies, such as the 1975 West Coast Fishing Vessels Casualties Inquiry and the recent Cross Report on Search and Rescue. The Department has also done specific risk analysis on new areas such as Arctic development.

13.79 We obtained data from the Department and external sources to illustrate how such data could be useful in managing marine safety. We noted, from data gathered by the Coast Guard, that although the number of deaths related to Canadian fishing vessels has been declining generally, both the number of accidents and total vessel losses increased significantly from 1977 to 1981. The Coast Guard pointed out that increased activity as a result of extending the fishing limit to 200 miles in 1977 should be taken into account when interpreting the data. We therefore used the Department of Fisheries and Oceans annual statistics on the number of fishing vessels registered in Canada.

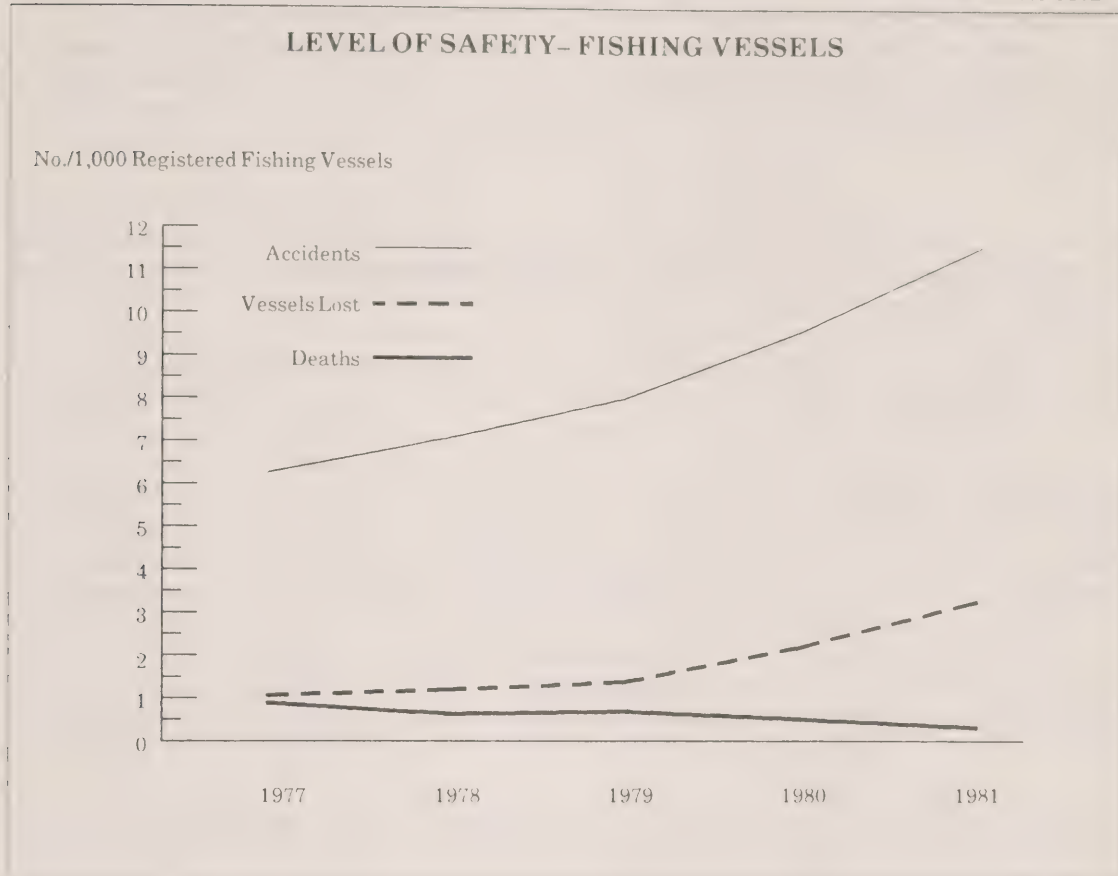
13.80 Using these data, we developed a number of potential indicators for the relative safety of fishing vessel traffic. Exhibit 13.2 shows that the number of deaths per 1,000 registered fishing vessels declined during the 1977-1981 period, while the number of accidents and number of total losses per 1,000 registered vessels have more than doubled. We believe there is a need for the Department to collect and analyse such data on an ongoing basis to determine areas where corrective measures may be required.

13.81 The Department should develop analytical procedures for monitoring the level of safety in all major areas of risk, identifying situations requiring redirection of effort, and improving its information base for responding to external pressures.

Department's response: The Department agrees with this recommendation and notes that full implementation of this recommendation must be considered long

term. However, a study will be started late 1983 with the objective of developing the necessary information systems and analytical capability.

Exhibit 13.2



Coast Guard – Ship Safety Operations

13.82 Pursuant to the Canada Shipping Act, about 5,000 ships of Canadian registry are subject to inspection and certification by departmental inspectors. About 2,400 vessels are inspected each year. We accompanied these inspectors as they inspected 44 typical vessels. We noted that inspectors made certain that any deficiencies identified were corrected before granting safety certificates.

13.83 The Canada Shipping Act allows the Department to charge ship owners for carrying out these inspections. Also, one of the Department's objectives is "to recover the costs of departmental facilities and services that are provided in support of Marine Transportation requirements." We found that, in spite of this, the Department did not regularly update its fee schedules to reflect cost increases, with the result that its cost recovery rate for ship inspections has declined over the last decade from 20 per cent to only 7

per cent. Had the Department maintained even its 20 per cent cost recovery rate, it would have collected more than \$10 million in additional revenues over the past 10 years.

13.84 In 1979, the Department proposed a plan to increase fees for ship inspections. The plan called for a series of increases over a five-year period to achieve full cost recovery for its services. However, the Department told us that, because of adverse public reaction, the plan had to be withdrawn. In 1982, the Department virtually doubled all major fees. A regular review of fees would prevent the need for such large increases. However, further increases over the next two years are limited under the Government's 6 and 5 program.

13.85 The Department should regularly review fees for all ship inspection services for which charges are levied, to ensure that planned levels of cost recovery are maintained.

Department's response: The Department responds that this review will be done commencing in 1984.

Marine Personnel Training

13.86 In recent years, the marine industry in Canada has suffered from a shortage of qualified personnel due to difficulties in attracting and retaining the quality and quantity of career-oriented personnel needed. The Canadian Government recognized this problem in the early 1970s. Accordingly, in 1975 it approved the National Advisory Council on Marine Training (NACMT) Program. The Program's objective was to "increase recruitment and retention of marine personnel and to improve the national capability in marine training."

13.87 The public inquiry following the 1979 fire on the *Cartiercliffe Hall* indicated that inadequate emergency training for crew members was a critical factor in the loss of life. The Commissioner of inquiry recommended that "marine emergency duties courses be set up under the aegis of the Coast Guard." Following this, the NACMT increased its emphasis on marine emergency duties training.

13.88 The Department is seeking more funding for its marine training program and points out that, to improve the performance of personnel in emergencies, the efforts of federal and provincial governments, vessel owners and operators, ships officers and crew and unions must be co-ordinated.

13.89 Recently the Department has, in certain areas such as the Great Lakes, increased its emphasis on drills to assess the preparedness of marine personnel in simulated emergency situations. During our audit, we asked the Department's inspectors to call for emergency drills on board Canadian ships. In certain instances, the inspectors concluded that the performance of the personnel was less than satisfactory.

13.90 The Department should increase its efforts to assess the preparedness of marine personnel in simulated emergency situations to ensure that marine training programs are achieving their objectives.

Department's response: The Department answers that it is in agreement with this recommendation. The Coast Guard has implemented a program of witnessing additional fire and boat drills on classes of ships which have been adjudged on a risk analysis to constitute a relatively higher risk to lives in these contingencies.

Foreign Flag Vessel Compliance with Canadian Regulations

13.91 In 1976, the Department introduced the Eastern Canada Traffic Regulation System (ECAREG) because it recognized that foreign flag vessels represent a major threat to marine safety and the environment. ECAREG requires the master of a foreign ship to declare, upon entering Canadian waters, any deficiencies with respect to Canadian charts and publications, any defects in the ship's hull, machinery or navigation equipment, and any conditions that could pose a pollution risk. Our tests revealed instances where charts and publications were not up to date and navigational equipment such as radar was not operational. In certain of these instances, the master had not reported these deficiencies to ECAREG as required. We were informed by the Department that it does not levy penalties where such cases are identified. However, the master of the ship is asked to rectify the deficiency before continuing the voyage in Canadian waters.

13.92 The Department should review the level of foreign flag vessel compliance with Canadian regulations and take action, if necessary, to improve compliance.

Department's response: The Department agrees and will undertake a review commencing early 1984.

Foreign Flag Oil Rigs

13.93 The Canada Shipping Act gives the Department of Transport authority to inspect all oil rigs operating within 12 miles of Canada's shore. The Act also authorizes the Department to inspect a rig anywhere in the world if registered in Canada. Under the Oil and Gas Production and Conservation Act, the Department of Energy, Mines and Resources is responsible for ensuring an appropriate level of safety as well as pollution prevention for foreign flag oil rigs operating between the 12 and 200 mile zones. In early 1982, the two Departments signed a memorandum of understanding which requires certain Coast Guard involvement in the inspection of oil rigs and support craft. However, due to the complexities of oil rig technology, it was necessary to clarify the minimum standards for these foreign flag rigs and the Coast Guard's roles in their inspection. Subsequently, a letter was signed by the Deputy Ministers of the two Departments in May 1983 stating that the Department of Transport, through the Canadian Coast Guard, will develop a national marine safety standard for all off-shore drilling units and supporting vessels, and will inspect foreign rigs

using the same policies, procedures and practices followed in inspecting Canadian rigs. This timetable estimates completion by early 1984.

Search and Rescue

13.94 Marine search and rescue operations are also part of marine safety. Departmental operating expenditures for this activity are forecast at \$43 million for 1983-84, triple the level of six years before.

13.95 Search and rescue has been the subject of a number of major studies in recent years. The latest was a Cabinet-directed study that resulted in a report tabled in the House of Commons in December 1982. The report dealt with the significant areas related to search and rescue. It made more than 50 recommendations for improving management, for planning operations and for reducing the number of search and rescue incidents. Certain recommendations are specifically directed at pleasure craft and fishing vessels, which account for most marine search and rescue incidents. The importance of safety education and promotion is emphasized.

13.96 The Government has stated that it has accepted virtually all the recommendations and has already begun to implement them.

Icebreaking

13.97 Providing icebreaking services in Eastern Canada costs more than \$90 million annually. Weather conditions and the need to maintain open shipping lanes to certain ports in the Atlantic Provinces and the St. Lawrence Seaway System throughout the winter months determine the actual amount of icebreaking work done by the Coast Guard. The services are provided without charge. They have evolved in response to growing demand.

13.98 The need to provide icebreaking services has not been analysed in terms of either economic benefits or meeting other objectives, such as flood prevention. The Coast Guard has also not defined levels of service to be provided. Accordingly, the Coast Guard has no objective basis for deciding how many icebreaking vessels it needs, and how best to deploy them to make optimum use of resources.

Eastern Arctic Sea Lift

13.99 The Eastern Arctic Sea Lift co-ordinates and expedites the annual delivery of equipment and supplies to Arctic locations by sea. Departmental policy requires that the direct costs of providing the services be recovered.

13.100 Over the last five years, expenditures for non-government shipments totalled \$6 million. The Department extends credit to shippers from funds appropriated by

Parliament for operating expenditures. We noted that, as of 31 March 1983, there were outstanding receivables of \$3.2 million related to the Arctic resupply operation. Of this amount, \$2.1 million was due from a carrier on behalf of which the Government incurred expenses for alternative delivery of cargo because of ice conditions. This amount is currently under litigation. A further \$500,000 related to years prior to 1981, and it is doubtful that it will be collected. The Department has told us that in future it will not provide services unless it receives payment in full for all past services. It has also stated that it is negotiating with major shippers for an advance payment of 50 per cent at the time of loading.

Fleet Human Resource Management

13.101 The Canadian Coast Guard, and the marine industry generally, has experienced shortages of qualified personnel to operate its ships. Government studies have linked this to a number of economic and social factors, such as:

- fewer young officers aspiring to senior positions at sea;
- heavy demands for both deck and engine disciplines generated by off-shore energy projects;
- the need to subordinate personal human needs and wants to the operational needs of keeping the ships at sea; and
- changing lifestyle demands, which have lowered the average expected length of careers at sea from about 14 years in the 1950s to 8 years in the 1980s.

13.102 A 1975 departmental study identified similar problems in the Coast Guard Fleet. Other problems noted included high attrition rates, particularly on icebreaking vessels, widely perceived concerns among crew members about the lack of career opportunities, and the inadequacy of marine training and development.

13.103 We reviewed the progress since 1975 in responding to the problems identified in the areas of training and development of ships' officers, recruitment, selection, training and retention of ships' crews, and also reviewed certain vessel scheduling and utilization problems.

Training and Development of Ships' Officers

13.104 A recent interdepartmental study of marine human resource requirements in Canada to 1990 indicates both a current shortage and increasing difficulty in meeting the demand for these resources. In early 1983, 55 of the 680 Coast Guard ships' officers were operating in positions above the levels of their certificates of competency. Projected demand for qualified marine personnel is predicted to increase with economic recovery.

13.105 Priorities for training and development of Coast Guard ships' officers were identified in the 1975 study, and the Fleet Integrated Management Concept was adopted as the solution. However, we noted that recent activities in training and development have not been at the rate established by the Department as necessary to ensure the required technical competence of officers. For example, the study indicated that a desirable level of training would be 23 days a year for officers. We noted, however, that actual training level in 1982-83 was only 7.1 days.

13.106 Insufficient commitment to training has resulted in these low training levels, undermining the intent of the fleet integrated management concept. As a consequence, there is a continued shortage of qualified senior ships' officers. If these conditions are permitted to prevail over the five years projected for the concept's implementation, the Coast Guard will find it difficult to ensure an adequate number of qualified ships' officers for its fleet.

Recruitment, Selection, Training and Retention of Ships' Crews

13.107 The 1975 study, in analysing problems with the selection, training and retention of ships' crew, noted the following:

- the Coast Guard has found the qualifications and suitability of candidates of ships' crew, in many cases, to be less than required;
- many of these candidates regard their employment as short-term rather than as a possible career, and their motivation and morale were described as low; and
- attrition rates are high.

13.108 Eight years later, these problems remain. Coast Guard management indicated that ships' officers are currently recruited from three primary sources in the following approximate proportions: the Canadian Coast Guard College, 50 per cent; industry and other employers, 30 per cent, and ships' crews, 20 per cent.

13.109 At the time of our audit, management had formed a task group to further study and devise an implementation plan to improve the quality of the ships' crews so as to upgrade qualifications, improve retention and provide a higher number of officers from this source. However, initial plans include a projected timeframe of three to five years for this initiative. The training level for crews in 1982-83 was 3.8 days – a level of 10 days is identified as desirable by the Department. Comments made earlier about the protracted implementation period for training and development of ships' officers apply equally to the issue of providing adequate ships' crews. If means are not found to accelerate initiatives in both these areas, the Coast Guard may find itself hard-pressed to realize its stated intent of achieving adequately manned vessels throughout the fleet.

Vessel Scheduling and Utilization

13.110 The Department has experienced difficulty in granting compensatory leave earned by ships' officers and crew, while at the same time maintaining delivery of approved programs. For example, an internal study showed that over 470,000 hours of leave credits were earned in 1979-80, of which only 19 per cent was granted as leave and the remainder was either paid in cash or held in reserve to be taken at a later date, at the option of the employee. The Department is caught in a dilemma: if leave is granted, ships will be tied up and programs will suffer. If leave is refused, morale will decline and the Department could suffer a greater turnover of officers and crew.

13.111 The Coast Guard is carrying out two pilot projects to address these problems. It is testing different scheduling systems to determine how best to provide officers and crew with regularly scheduled time off and training. This could also improve vessel utilization. At present, certain vessels are worked on a five-day week (Monday to Friday). Thus, approximately 25 per cent of available vessel time is unused, unless overtime is incurred. If these pilot projects produce an improved scheduling system, the Department could realize long-term benefits through improved morale, better training and lower attrition of officers and crew. In addition, significant savings could result from increased vessel utilization, thereby reducing the number of vessels needed to deliver the Coast Guard's programs.

Departmental Common Services

Role of the Senior Financial Officer

13.112 We found that the role and responsibilities of the Department's Senior Financial Officer (SFO) had been clearly defined and that program managers were aware of them. For the Marine Transportation Program, the SFO is responsible for advising on the financial implications of major program initiatives and developing financial and management information systems. He is required to advise the Deputy Minister on the financial implications of various matters affecting Crown corporations.

13.113 We found that, although the SFO scrutinizes the financial implications of all major program initiatives, this review was not always effective. Deficiencies we noted relating to the Fleet Capital Investment Plan and the introduction of Vessel Traffic Services were not brought to the attention of the Deputy Minister.

13.114 We also noted an instance in which certain central agencies authorized terms for a payment of \$20 million to a Crown corporation from a departmental appropriation. This payment was knowingly made in advance of proven need. The SFO was not made aware of this unusual transaction. Therefore, he did not have the opportunity to examine the propriety or other implications of the payment.

13.115 The SFO has been involved in a number of projects to develop financial and management information systems. The Department has told us that it will be looking into

the many instances in which adequate cost information is lacking. Recently, it has also taken steps to reinforce the SFO's role in reviewing and controlling the financial aspects of the Marine Transportation Program.

Internal Audit

13.116 Internal Audit's mandate is to ensure that all key aspects of the management process are independently reviewed and the Deputy Minister provided with information on how well the Department's programs are managed.

13.117 For the Marine Transportation Program, we found that, from 1978 to 1982, many internal audits and operations reviews were oriented toward examining individual organization units. Many audits concentrated on administrative areas such as financial, personnel and materiel management systems. Many operations reviews of the Canadian Coast Guard examined its management and operating practices, and the reports provided useful information on these subjects to the Marine Administrator. For example, the reports pointed out weaknesses in the planning process, such as undefined levels of service. Others indicated the need for Headquarters guidance in developing operating standards and procedures for many of the Coast Guard's activities. However, significant management issues in marine navigation, safety and capital investment in the fleet were not examined on an activity-wide basis.

13.118 Thus, these results were not reported to the Deputy Minister in a way that revealed their full financial and other impact. This made it difficult for the Deputy Minister to appreciate the full significance or the urgency of weaknesses identified by internal audit. Consequently, Internal Audit did not provide the Deputy Minister with the kind of information required about the way the Marine Transportation Program is managed.

13.119 **Follow-up on previous recommendations.** The Department has taken a number of steps to improve its internal audit in response both to the recommendations in our 1978 and 1982 Reports and to recent comments by the Comptroller General. We were informed that many improvements in the internal audit planning, evidence gathering and reporting processes have been initiated. Furthermore, in consultation with the Comptroller General, a re-organization of the internal audit function has been implemented.

Measuring and Reporting Program Effectiveness

13.120 The measurement of the effectiveness of Transport Canada's programs is carried out in two different ways: through periodic program evaluation, and through ongoing performance measurement. The former is the responsibility of the Program Evaluation Branch, while responsibility for the development of performance measures has been assigned to the program managers.

13.121 Program evaluation. The responsibility for conducting program evaluations, which would, among other things, assess the effectiveness of Transport Canada's Programs, was assigned to the Program Evaluation Branch, initially in 1975. This mandate has since been reaffirmed on two occasions, most recently in March 1983. Although the Program Evaluation Branch has conducted a number of studies of marine activities, we consider that they were either management or operational reviews. The Branch has recently completed a feasibility assessment for evaluating floating aids to navigation. However, no program evaluations of the Marine Transportation Program have been completed.

13.122 Performance measurement. Responsibility for monitoring performance was assigned in 1976 when the Department required that indicators for performance measurement be developed. The Canadian Marine Transportation Administration (CMTA) has initiated the development of such indicators for the activities of the Canadian Coast Guard. However, at present, information on the impact of CMTA's activities in terms of the safe and efficient movement of marine traffic is not collected, analysed and reported routinely and systematically to keep the Deputy Minister informed of the overall effectiveness of its activities.

Departmental Expenditure Plan

13.123 The Department has prepared an Expenditure Plan (Part III of the Estimates) for its Marine Transportation Program. The new form of the Estimates is directed toward improving accountability to Parliament by providing more and better information on the Program. Since this was the first attempt to provide such information for the Marine Program, we did not conduct a detailed review of the Departmental Expenditure Plan. However, we believe that a number of the recommendations in this chapter could provide the Department with an improved information base for future Expenditure Plans. This would apply particularly to those relating to the need for improved management information and analytical capability to plan and control activities, such as aids to marine navigation, and icebreaking.

NATIONAL LIBRARY OF CANADA

NATIONAL LIBRARY OF CANADA

Table of Contents

	Paragraph	Page
SYNOPSIS	14.1	433
Audit Scope	14.16	437
Observations and Recommendations		
The Collection		
Legal Deposit	14.19	437
Preservation	14.22	438
Bibliographic Records		
National Bibliography	14.28	439
Union Catalogues	14.30	440
National Bibliographic Standards	14.41	442
Technology Support		
Library Automation	14.47	443
Network Development	14.59	446
Library Direction at the Executive Level		
Mandate	14.62	446
Co-ordination of Federal Government		
Library Services	14.64	447
Planning and Control	14.71	448
Administrative and Evaluation Functions		
Managed by the Public Archives of Canada	14.80	450
Program Evaluation	14.81	450
Efficiency	14.84	450
Reporting to Parliament	14.86	450
The National Library Advisory Board	14.90	451
Exhibit		
14.1 Summary Organization Chart		435

NATIONAL LIBRARY OF CANADA

SYNOPSIS

Overview

14.1 As a library, the National Library is unique in Canada: its users are mainly other libraries, who rely on its collection and its expert help in locating library material. In size, the National Library of Canada (NLC) ranks fourth in Canada in holdings (approximately 5.4 million books and other documents) after the universities of Toronto, British Columbia and Alberta. It ranks second in number of staff. The National Library had a late start: it was first recommended by Sir John A. Macdonald in 1883, but not established until 1953. Thus the major collections had already been built up at the large universities and public libraries, in the Library of Parliament and, in some subjects such as agriculture and labour, in departments of government. The Library therefore concentrates its collecting on works by Canadians or about Canada and must still build its pre-1953 collection. NLC's collecting of non-Canadian material is mainly in the humanities and social sciences; the Canada Institute for Scientific and Technical Information (CISTI), part of the National Research Council, has national responsibility in the areas of science, technology and biomedicine.

14.2 NLC does not have the degree of influence in the Canadian library community that size, range and depth of services, and collection give the Library of Congress in the United States or the British Library in the United Kingdom. However, it seeks, and is expected to play, a leadership role in areas such as national information and lending networks, book preservation and library standards.

14.3 The Library is greatly affected by computer and telecommunications technology. For example, the advent of minicomputers has allowed libraries to build cataloguing systems to suit their own needs and develop their own standards, some of which are not compatible with NLC's requirements for building a national bibliographic database. Although the Library is one of the smaller government departments, its own computer system (DOBIS) is complex.

14.4 The National Library's main objective statement in the 1983-84 Estimates is to "facilitate the use of the library resources of the country by the people and the Government of Canada". The sub-objectives are:

- to gather, preserve and make known the Canadian literary heritage in all disciplines;
- to develop and make accessible a national collection of library material and provide research, reference, information and document delivery services which support Canadian libraries and related institutions; and

to co-ordinate and participate in co-operative programs aimed at ensuring the provision and sharing of library and related services in Canada and internationally.

14.5 NLC's Estimates for 1983-84 show planned expenditure of \$30 million, using 540 person-years. It shares with the Public Archives of Canada financial and administrative services and personnel, internal audit and program evaluation functions, which are managed by the Archives (Chapter 15). The two organizations also share a headquarters building. The Library's organization chart is shown in Exhibit 14.1, which also sets out the Library's services.

Summary of Audit Observations

14.6 The collection. The primary means of acquiring published material is through the Book Deposit Regulations of the National Library Act, which require Canadian publishers to deposit copies of their publications with the National Library. NLC's administration of these Regulations met our audit criteria and, in our view, achieves for NLC the intended result of maintaining a reasonably comprehensive collection of Canadian publications.

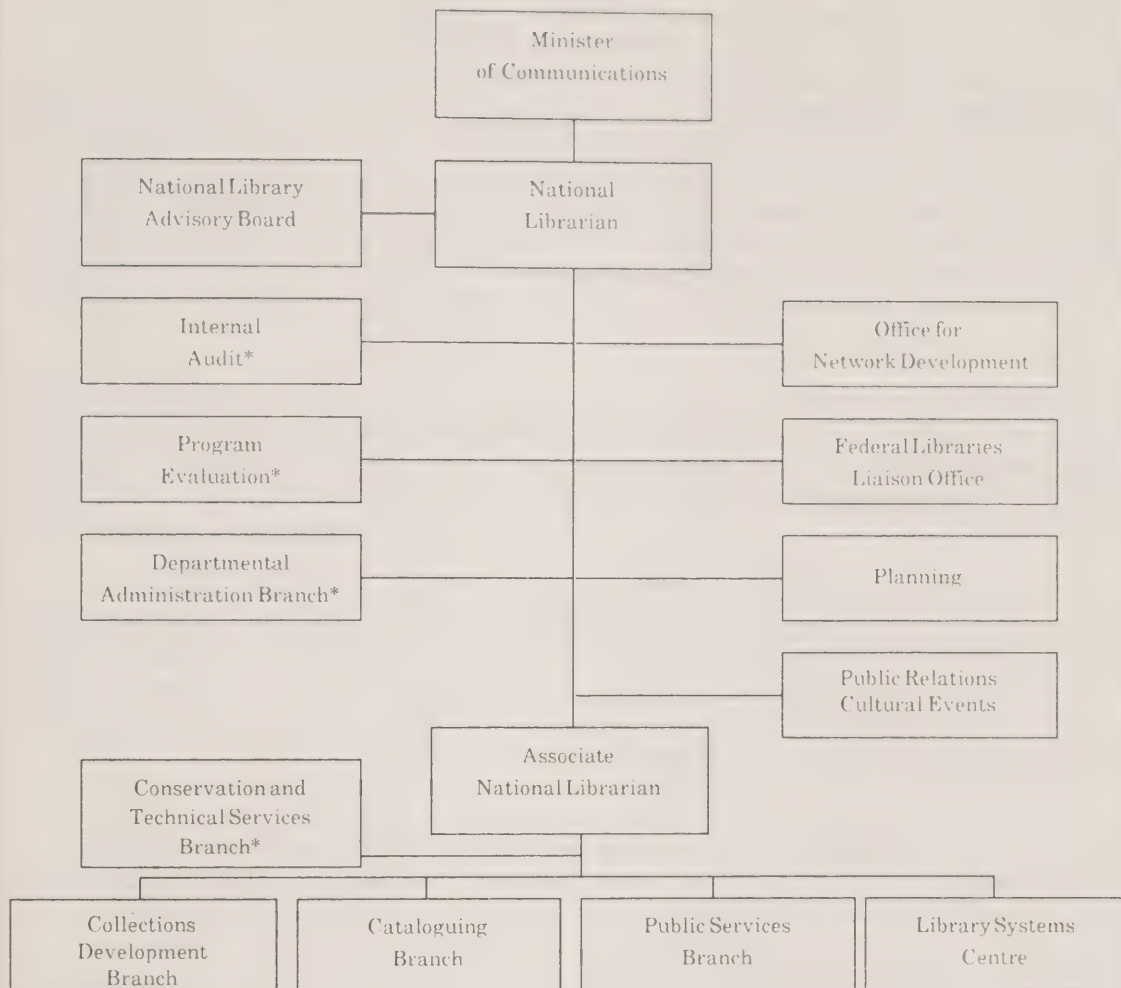
14.7 Various activities to preserve the collection have already been undertaken; for example, deacidification, microfilming, and videodisc research. However, they deal with only small portions of the collection and have not yet been co-ordinated and supported sufficiently to ensure preservation of NLC's collection for future generations. Management states that a formal preservation program will be established to strengthen the Library's preservation work.

14.8 Bibliographic records and cataloguing. As required by the National Library Act, the National Library compiles and publishes a national bibliography, *Canadiana*, which lists for the library community and others work published in Canada, by Canadians or specifically relating to Canada. Control over timeliness is reasonable for the most important listings.

14.9 It has become impracticable for the National Library to maintain a single national union catalogue as prescribed by the Library Act, listing which principal libraries in Canada hold what items. In response to location requests, the Library continues to provide a location service, using reference tools which include NLC's union catalogues for books and serials. However, NLC has not yet developed a national plan for a cost-effective means for Canadian libraries to locate books and other material; that is, a national bibliographic network that would perform the function intended for a single national union catalogue.

14.10 In the area of cataloguing standards, the National Library adequately develops and promulgates national standards or rules for bibliographic data, provides national

NATIONAL LIBRARY OF CANADA **Summary Organization Chart - 1 April 1983**



Services:
 Canadian Book
 Exchange Centre
 Canadian Theses on
 Microfiche
 Resources Surveys

Services:
 Canadiana Publications
 Bibliographic Standards
 MARC Records
 Distribution
 Cataloguing-in-
 Publication

Location & Interlibrary
 Loan (including Union
 Catalogues)
 Reference & Bibliography
 Multilingual Biblioservice
 Service for Handicapped
 Persons
 Document Delivery
 Reading Room
 Specialized Reference
 Services
 - Official Publications
 - Newspapers
 - Music
 - Rare Books
 - Literary Manuscripts
 - Children's Literature
 - Indian Rights Documentation
 - Library Documentation

Services:
 DOBIS Bibliographic
 Database
 Computer Services

* Provided by Public Archives of Canada

leadership and represents Canada in international standard-setting. The impact that adopting international cataloguing rules has on costs of cataloguing and providing library services in Canada requires more attention in view of the increasing need to control library costs.

14.11 Technology support. The development history of NLC's library automation system (DOBIS) shows major shortfalls in accomplishment. Completion of all planned modules, which in 1976 was thought to require 4 years, now appears to require at least 11 years. Despite management's experience with service delays, cost increases and significant and rapid changes in computer and telecommunications technology, NLC had made no major changes to the original objectives or development strategy for DOBIS. We believe there is an urgent need for Library management to take action to resolve the future of its automated system.

14.12 We also question whether Treasury Board's present level of involvement with departmental EDP systems can provide the external monitoring agencies such as NLC may need in developing and managing complex computer systems. This problem is discussed in Chapter 4, The Management of Computing in the Federal Government.

14.13 Network development. The Office for Network Development has been engaged since 1981 in testing a new telecommunications-based system (iNet) for connecting autonomous library databases. This supports the Library's highest priority, development of a "national bibliographic network". However, the objectives have not been made clear for this network or for NLC's own leadership role in its development. The Library does not have a strategic plan to guide its work in this area.

14.14 Library direction at the executive level. The National Library has not had a formal management planning process that produces and updates, in a form useful for managers, integrated strategic and operational plans for its main responsibilities. The statements of objectives and sub-objectives in Part III of the Library's Estimates do not specify what management intends to achieve and therefore do not provide an adequate basis for accountability and program evaluation. In particular, the Library's statutory role in co-ordinating federal government library services is not clear. Management has, however, taken steps to set up an integrated strategic and operational planning and control structure.

14.15 The National Library Advisory Board. Although the Board is not a management board with executive power, we think it should have a clearer and stronger review role within its advisory mandate to help ensure value for money from the Library's operations. In our view, the Board should be an important element in the accountability structure of the Library. Our suggestions for the Library's Board may apply to other government organizations in which boards should play an important review role.

Audit Scope

14.16 We first identified the functions or processes in the Library that in our view are central to meeting program objectives. We then assessed the adequacy of the Library's planning and management controls for these key functions and its accountability reporting to Parliament. The areas suggested by our preliminary survey were the Library's collection, bibliographic records, technology support, and the department-wide concerns of mandate, planning and control. All Library services depend on one or more of these basic functions.

14.17 Because internal audit, program evaluation, financial services, personnel and administrative services for NLC are supplied by the Public Archives, management control over these functions is assessed in Chapter 15. Some aspects of performance measurement that are solely the responsibility of NLC are set out in this chapter.

14.18 For each of the scope areas, we established criteria to assess whether plans and management controls in place demonstrate due regard for value for money and compliance with accountability obligations. Management agreed that our criteria were reasonable. For the National Library Advisory Board, our purpose was to review its role in the management and accountability structure of the Library.

Observations and Recommendations

The Collection

14.19 **Legal deposit.** To develop a complete national collection of books, journals and other material published in Canada, the National Library Act requires all Canadian publishers, except government agencies, to deposit copies with the National Library. Federal government publications are provided to the National Library under terms of a Treasury Board directive and provincial government publications are sent voluntarily. We examined the administration of the Act's Regulations to determine whether and how the Library assesses compliance by publishers.

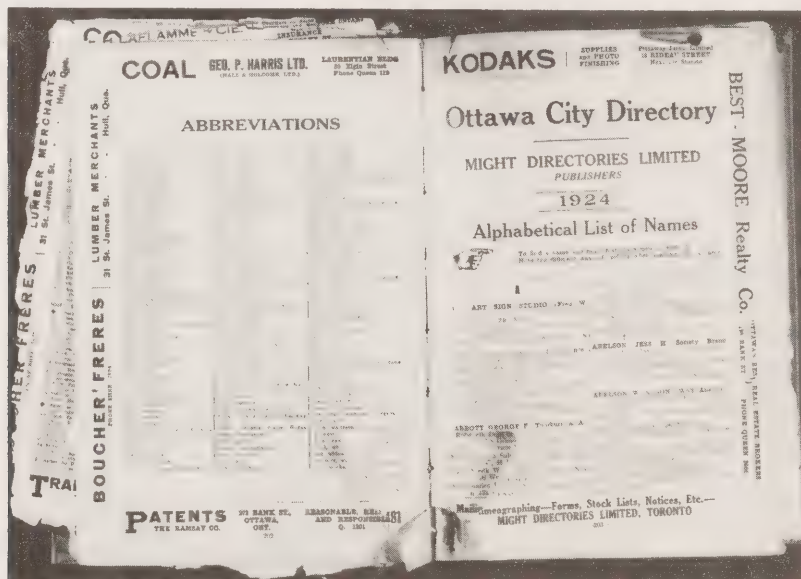
14.20 The Library's Program Evaluation unit reported in 1983 on the achievement of objectives for the legal deposit program. In our opinion, the evaluation was satisfactorily done. It concluded that this approach to obtaining Canadian published materials, which has been used since 1952, is effective and that compliance is high, estimated by the Collections Development Branch at over 98 per cent of the categories of publications covered by the Regulations.

14.21 Section 11 of the Act requires that two copies of each publication be deposited unless the unit price exceeds \$50. In this case, only one copy need be deposited and the Library normally purchases a second copy. Owing to the effects of inflation since revision of the Act in 1969, NLC is spending an increasing amount each year for the purchase of second copies. The amount involved is not yet large (about \$62,000 in 1982-83), but it is growing

steadily. We understand that management plans a review of the Act and that it will propose an amendment to address this problem.

14.22 Preservation. The National Library is responsible for the safekeeping of about 5.4 million books and other items, with an estimated value of between \$250 and \$350 million. Large portions of its national collection of Canadiana are, for all practical purposes, irreplaceable. We examined NLC's activities for long-term preservation of its library materials, particularly those dealing with environmental control, physical conservation, microfilming and other media transfer technologies, and disaster preparedness.

14.23 The severity of preservation problems facing all libraries is probably not appreciated by the public. Most paper materials produced over the past century have a life expectancy of only 25 to 100 years, after which they become too brittle to withstand normal use. (See photograph).



The Ottawa City Directory for 1924. Although only 59 years old, the paper has become so brittle that it is too weak to support its own weight and is beyond restoration. Preservation microfilming is the only practical way to make the text available to researchers.

14.24 NLC has not yet carried out a general survey of the physical condition of its collection and assessed the risks of deterioration. The National Library has taken some important steps in recent years to address this issue, notably the use of Public Archives' facilities to deacidify books and other paper materials. However, the number of items that

the Archives can process in a year to meet both Archives and Library needs is small relative to the total number requiring treatment. A demonstration project on the application of videodisc technology was carried out; subsequent activity has been limited to monitoring developments elsewhere, including work being done by the Library of Congress in the United States.

14.25 Currently, only half a person-year has been formally allocated for preservation work, although other staff are involved in specific projects. No person at a senior level has been specifically responsible and accountable for preservation planning, direction and monitoring over the long term, within the framework of a formal preservation program. Annual work plans for various preservation activities have not been based on a long-term plan; however, management reports that a planning process has begun.

14.26 The Library is working on a disaster preparedness plan for dealing with and preventing disasters such as fire and related water damage.

14.27 Management should assess the adequacy of the resources, organization and planning committed to preserving valuable National Library materials. Responsibility for preservation activities should be assigned at a senior management level. A strategic plan should make clear what is at risk, and the resources NLC intends to apply to preservation should be specified.

National Library response: In 1979, the National Library prepared a document outlining a comprehensive national conservation program, including preservation activities within the National Library. This document was discussed by the National Library Advisory Board, which subsequently made recommendations based on its contents. A revised document, A National Preservation Program for Library Materials in Canada, was prepared and became the basis for later preservation plans. Beginning in 1981, the National Library has requested, as part of its input to the Minister's Strategic Overview, the resources to carry out an adequate program of preservation at the National Library and has worked with Arts and Culture (DOC) and other concerned cultural agencies (Archives and Museums) to this end. The National Library is fully committed to the effort to obtain resources to preserve the materials in its custody and to play a leading role in the development of a national preservation program for libraries.

The diverse preservation activities of NLC will be combined into a single program and accountability and resources for this activity will be identified as an essential element of the Library's strategic plan.

Bibliographic Records

14.28 National Bibliography. As called for by the Act, the Library compiles and publishes *Canadiana*, the national bibliography listing materials published in Canada,

written by Canadians or dealing with Canada. Our audit examined NLC's management policies and directives for subject-matter scope, coverage of publishers and client services.

14.29 In our view, the National Library has met the intent of the Act and has in place adequate controls over management of the national bibliography. Drawing on legal deposit and other sources, *Canadiana* lists, for scholars and others interested in Canadian studies, nearly all Canadian materials published since 1953, when the Library was established. Some earlier *Canadiana* is also available. We found controls over the timeliness of the publication of the most important segments of *Canadiana* to be satisfactory.

14.30 Union catalogues. One of the Library's most important services, the location service for inter-library lending, tells other libraries in Canada and abroad where particular books, serials or other materials are located. Traditionally, location services have depended on one or more catalogues, called union catalogues, that show which libraries hold the books catalogued. We examined NLC's guidelines for scope, coverage and client services for its Union Catalogue of Books and Union Catalogue of Serials. We also looked at the application of standards to the processing of cataloguing records received for the union catalogues by libraries reporting additions to their holdings.

14.31 The National Library Act implies that NLC will maintain "a national union catalogue in which the contents of the principal library collections throughout Canada may be listed" (Section 7(1)b). However, by the mid-1970s it was generally recognized that the enormous growth of library materials in Canada made continuation of this highly centralized approach impracticable.

14.32 The availability, quality, coverage and completeness of union catalogues have a significant impact on the overall efficiency of library services in Canada, since they are the major tools for locating materials not immediately available in local libraries. Their economic significance has further risen in today's period of restraint and cutbacks, which has in most cases reduced the number of books and serials any one library can purchase, making libraries even more dependent on sharing resources.

14.33 By 1980, NLC was maintaining a manual card catalogue and developing its new computerized catalogues for books and serials. These union catalogues are major locator tools for library materials. They are used by NLC staff in combination with important external sources of catalogue information such as UTLAS, owned by the University of Toronto, which is used by over 200 institutions. With this combination of location tools, NLC management states that its historical success rate of finding close to 80 per cent of requested publications in Canada has been maintained.

14.34 The Canadian Library Association recommended in 1977 that the concept of a national union catalogue, as set out in the Library Act, be replaced by that of a "national bibliographic network", a co-operative network of bibliographic centres and locator tools. In

our view, NLC's Union Catalogue of Books and Union Catalogue of Serials currently provide adequate support for NLC's location service for other libraries.

14.35 For the Union Catalogue of Books, the major weakness is the lack of an objective for coverage; that is, what libraries and holdings should be included. The number of libraries reporting their acquisitions to NLC has been gradually dropping. In part this is because some libraries are using their own or other computer facilities, and converting this information to the particular machine-readable form useful to NLC is deemed too costly.

14.36 Given that the concept of a national bibliographic network was accepted by NLC as the logical successor to the idea of a single union catalogue, we would have expected the Library to have set out a course of action to achieve such a goal. This would include:

- developing a consensus on what is meant by a "national bibliographic network";
- describing alternative strategies for achieving the purpose of such a network or networks, including consideration of centralized vs decentralized cataloguing systems;
- deciding, with the library community, the roles and responsibilities of the National Library, other libraries, and the other interests affected;
- specifying what library materials or catalogue information would fall within the scope of the network; and
- establishing appropriate co-ordination and management mechanisms for development and operation of networks.

14.37 Although NLC cannot dictate how the library community should operate, or even co-operate, in our view the National Library Act's provision for a national union catalogue places the statutory responsibility for achieving the Act's intent on the National Library. Assuming that the Act's intention is still valid, this means developing a strategic plan to guide the Library's effort.

14.38 NLC has taken various steps in the direction of developing a national bibliographic network, including a national study on interlibrary lending, management of a telecommunications project (iNet) and forming a committee of the Library Board. However, at the time of our audit, it had yet to bring together and document the work under way and what still needs to be done. In our view, the appropriate vehicle for this is a cohesive strategic plan, available for review by the library community, the Board and others affected.

14.39 The National Library should define the immediate and long-term roles and objectives for NLC's computer-based union catalogues of books and serials and relate these to its planning for a national bibliographic network.

National Library response: Roles and objectives for computer-based union catalogues are reviewed as they relate to the needs of users, the effective use of resources, rapidly changing technologies, and the existence of other interloan support services. As an important node in an already existing co-operative national and international interlibrary loan network, the scope of the Canadian Union Catalogue of Books will continue to be modified to ensure adequate coverage and to avoid unnecessary duplication. All modifications are the result of ongoing consultations with user libraries, members of the National Library Advisory Board and its committees, and management of other information bases and other national libraries.

14.40 The National Library should consider an amendment to the Library Act so that service expectations for the National Library emphasize locating library material in Canada rather than maintaining a single tool such as a national union catalogue.

National Library response: A review of the Act will be undertaken, during which rewording to emphasize service expectations rather than tools for carrying out services will be considered. Amendments will be proposed as necessary.

14.41 **National bibliographic standards.** We examined how the National Library carries out its responsibilities for developing, evaluating, applying and promulgating standards for bibliographic data. Such standards, used by cataloguers, searchers, publishers and librarians generally, have a significant impact on overall economy, efficiency and effectiveness of library services and are fundamental to exchanging and communicating library data in both printed and machine-readable form.

14.42 Our audit of standards activities in the Cataloguing Branch indicated that NLC adequately develops, applies and promulgates standards for the Canadian library community, provides national leadership, and represents Canada on international standards bodies. An examination of the standards themselves was beyond the scope of our audit, but we assessed the extent to which NLC has evaluated their impact on the cost of cataloguing and of providing library services.

14.43 The Anglo-American library community may have tended to accept standards established by the cataloguing discipline of the profession without fully questioning the economics involved. All Canadian libraries are affected in some way by international cataloguing rules. However, cost-effectiveness of cataloguing practices is receiving increasing attention; for example, in studies by the Centre for Catalogue Research, funded by the British Library.

14.44 In Canada, libraries use cataloguing records created elsewhere, mainly by the U.S. Library of Congress, for meeting 85 to 90 per cent of their needs; re-cataloguing these would not be economic. Only records for Canadian material are created by NLC, and these must be compatible internationally. The standards applied for most records are thus largely

beyond NLC's control and, for economic and other reasons, Canadian libraries accept and use these standards. Within this context, the Cataloguing Branch of the National Library has modified the standards to meet specific Canadian needs, such as bilingual terminology, and has considered the cost-effectiveness of applying them.

14.45 We recognize the special concern of a national library for standards. However, in view of the cost of entering, storing and using catalogue records, we think there is a need for an independent review – involving management of other Canadian libraries – of the cost-effectiveness of current standards. This would ensure that cataloguing provides adequate but not excessive information.

14.46 National Library management, in consultation with management of other Canadian libraries, should review NLC's cataloguing standards to ensure that they are cost-effective in meeting the needs of both NLC and other Canadian libraries.

National Library response: Through its advisory committees and related bodies the National Library has worked to ensure that the cataloguing standards used in the creation and dissemination of bibliographic records are effective in meeting the needs of both NLC and Canadian libraries, as well as being consistent with international agreements for the exchange of cataloguing data. In the future NLC plans to encourage more extensive research and review, within the national and international library communities, of the actual effectiveness and cost/benefit of bibliographic and cataloguing standards, both existing and proposed.

Technology Support

14.47 **Library automation.** The National Library first introduced library automation methods in the late 1960s and has been steadily increasing activities and expenditures in this area. We reviewed the management process leading to acquisition in 1976 of the DOBIS system that has since formed the basis for planning and implementing the automation of cataloguing, acquisition, circulation and serials control at the National Library. DOBIS is used by 17 other federal government libraries, several of which provide nationwide services, and 2 provincial libraries.

14.48 Our audit of the management of the DOBIS project examined planning, budgeting and submissions documents prepared by NLC for the Treasury Board between 1976 and 1983. We expected to find that variances from approved plans were addressed, objectives were reassessed if necessary, and the most cost-effective methods were employed. We also expected to find that the system development process for DOBIS was based on a strategic plan that outlined alternatives for meeting the overall purpose of the system.

14.49 DOBIS is significant in that it is by far the largest single project undertaken by the National Library. This can be measured in terms of gross expenditures by NLC and the

National Research Council library (CISTI) – \$7.23 million for development and database maintenance, and \$10.20 million for operations to 1982-83 – its impact on other library operations at NLC, and its potential impact on other federal libraries. Treasury Board directed that NLC and CISTI co-develop the system for the benefit of all federal libraries; no other federal funds were to be spent on developing major departmental library systems. The DOBIS project is one of very few attempts world-wide to automate the operations of a large library in an integrated, centralized way.

14.50 The National Library met Treasury Board criteria in carrying out the selection process that preceded acquisition of the DOBIS software package, including demonstrating need, analysing alternatives and demonstrating feasibility and cost-effectiveness. Since the 1976 decision to develop DOBIS as an "integrated library data management system", however, there has been a large disparity between plans and results.

14.51 The earliest proposal to Treasury Board, in 1976, projected completion of an integrated system comprising five main modules within about four years, but seven years later, in 1983, only the cataloguing and searching modules are in service. The last of the remaining three main modules is not expected to be available until 1987-88. This is 8 years later than originally forecast and 11 years after development began.

14.52 The full development costs for the system were given as \$2.75 million in 1976. They were reassessed as \$3.34 million about a year later and in 1979, when the final proposal for full implementation was approved by Treasury Board, the revised projected development costs through 1984-85 were reported at \$4.16 million (1979 dollars). In 1979, the estimated maintenance costs of the planned database were introduced into the DOBIS total cost picture for Treasury Board. These include costs of supplying enhancements for users and administering the database and were projected at \$13.37 million for the period 1979 through 1984-85. NLC's costs for using the system in 1982-83, in addition to maintenance costs, were \$3.36 million and are projected at \$6.34 million for 1984-85.

14.53 In its most recent submission to Treasury Board for funding (1982), the Library did not segregate projected costs for the development of each DOBIS component. Although projected total expenditures for development are given in NLC's annual EDP report to Treasury Board, the amounts are not linked to the development of specific system components. Thus it is difficult to hold management accountable for expenditures related to the development of any specific components of DOBIS.

14.54 As of June 1983, NLC management had made no major changes to the original objectives and development strategy for the system, yet there was strong evidence of the need to reassess the future of DOBIS. This included: lengthening development time, delays in delivering promised services, a backlog of systems projects, lack of target dates for completing three of the basic modules for the system, and major industry advances in computer technology and system concepts. Perceptions of DOBIS held by federal departmental librarians we interviewed are noted in the section on co-ordination of federal library services. The central problem, in our view, has been management's attempt to create

an "integrated library management system" through DOBIS: a central system which is all things to all users.

14.55 In March 1982, NLC management established the Network and Automated Systems Working Group. One of its major concerns was the problems with DOBIS, but by June 1983 the Working Group had not made any recommendations on the future of DOBIS. There has been no strategic plan prepared to guide development of the DOBIS project; however a consultant's feasibility study on strategic planning for the database was reported to management in April 1983.

14.56 The National Library and CISTI, co-developers of DOBIS, should establish and set limits on the role of DOBIS in federal and other libraries; in particular, they should decide whether the purpose of the system is, fundamentally, to maintain a database (NLC/CISTI catalogues and union catalogues), to provide a range of library automation services to federal and other libraries, or both.

National Library response: The future of DOBIS is currently under review, especially in relation to the advent of mini-systems capable of performing specific functions. Initial steps toward such a review have already been undertaken by the National Library and CISTI.

14.57 Budgets and cost projections for development of the DOBIS system (as opposed to its maintenance and operation) should be identified and clearly related to the specific modules, components, services or other elements that are to be developed.

National Library response: Full breakouts of DOBIS budgets and cost figures have always been available and will be provided in future documents, as recommended.

14.58 The National Library, with advice from the Council of Federal Libraries, should determine the present and future needs of federal libraries for automation services. NLC should evaluate the cost-effectiveness of providing them. Alternatives to continuing to develop DOBIS as presently planned could include adopting a different strategy for completing DOBIS or using external commercial services for some federal library functions. The DOBIS development plan should be modified accordingly.

National Library response: The National Library will request resources for 1983-84 and 1984-85 to carry out the study of federal library, NLC and CISTI automation service needs and of the alternative ways of providing these, with a view to determining the most flexible, effective, and cost-beneficial system or combination of systems. Subsequent to this, the Library's EDP development plan will be modified accordingly and any necessary resources will be requested to implement this changed plan.

14.59 Network development. The highest priority of Library management is the development of a national bibliographic network, as discussed under Union Catalogues. The Office for Network Development is conducting, with several other libraries, the iNet field trial, a test of the technical feasibility of certain electronic means of connecting autonomous library databases. It is to be completed in 1983-84 and is to be followed immediately by a market trial involving service charges to those using the commercial telecommunications facility that will link the systems. The Library's program evaluation unit plans to evaluate the technical feasibility phase this year, as requested by the Cabinet's Committee on Social Development, to provide a basis for decisions on further pilot projects in network development. We expect the report to the Minister to include also any useful information gained to the date of the report on the implications of the market trial's results with respect to commercial telecommunications charges.

14.60 We examined the iNet project to see how it fits into plans for fostering development of the national bibliographic network. Although Library management places great importance on the iNet project as means of aiding development of a national bibliographic network, there is no strategic plan for national network development setting out the purpose, characteristics, components and structure of the network and the role to be played by the National Library in its development.

14.61 The National Library should develop a strategic plan to guide its activities in the development of the national bibliographic network.

National Library response: A strategic plan for network activities will be developed within the department's proposed strategic/operational planning and control structure. Owing to the fact that its development rests on the voluntary co-operation of many institutions – federal, provincial and private – the strategy must be one which provides for a great deal of flexibility and pragmatism and will inevitably evolve along with the availability of new technology.

Library Direction at the Executive Level

14.62 Mandate. Program objectives and sub-objectives statements in Part III of the Library's Estimates were consistent with the spirit of the Act, but were not specific enough to tell Parliament and the library community what the Library intends to accomplish, as a basis for accountability and program effectiveness evaluation. For example, the sub-objective "to develop and make accessible a national collection of library material" provides no yardstick by which to assess accomplishment and does not define a national collection of library material.

14.63 The National Library should develop statements of objectives and sub-objectives for Part III of the Estimates which, to the extent possible, tell Parliament and the library community what management intends to achieve.

National Library response: Objective and sub-objective statements will be reviewed and revised as appropriate for inclusion in Part III of the Main Estimates for 1985-86.

14.64 **Co-ordination of federal government library services.** Section 7(2) of the National Library Act states, in part:

Subject to the direction of the Governor in Council, the National Librarian may co-ordinate the library services of departments, branches and agencies of the Government of Canada....

14.65 However, co-ordination is not defined in the Act, and we found through our interviews with librarians in the dozen departmental libraries we surveyed that they were uncertain about how the National Library interprets its co-ordination role.

14.66 The National Library's information on federal libraries is weak as a basis for assessing what its co-ordinating role should be to produce greater value for money in government library services. For example, the Library did not know the financial and human resources invested in the 280 federal government library units across Canada.

14.67 The DOBIS database system was developed by NLC for the benefit of all federal libraries, thereby satisfying in part NLC's co-ordination role. However, because of its slow development, it is generally perceived as only a shared searching and cataloguing system rather than an "integrated library management system" as it is described in Part III of the Estimates. Eighteen federal libraries use DOBIS. More than 20 use the University of Toronto's UTLAS system, and others use alternative systems. We did not attempt to assess how many of the libraries are using systems other than DOBIS because of its present problems.

14.68 The Council of Federal Libraries was set up in 1976 to advise and assist the National Librarian in co-ordinating library services. Since then, Council committees have enquired into several matters of interest to federal librarians. Librarians interviewed expressed concern about several management and policy issues, including the federal librarians' roles in:

- facilitating access to information under the new Access to Information Act;
- managing information resources within departments and agencies; and
- determining the services and charging policy for non-government and non-department users.

14.69 Other issues include designating certain departmental library collections as national resource collections and the need for a federal libraries chapter in Treasury Board's Administrative Policy Manual. Librarians looked to the National Library for more leadership in these areas.

14.70 The National Library should communicate clearly to the federal library community its interpretation of its co-ordinating role under the National Library Act, including its view of the limits to its responsibilities. It should also try to clarify what federal librarians expect in the way of leadership from the National Library.

National Library response: The National Library has a considerable number of files of information on policies, collections and services of federal libraries and manages or oversees several co-operative projects. Based on this information, and following consultation with the Council of Federal Libraries, a statement of interpretation of Section 7(2) will be prepared.

14.71 **Planning and control.** In 1977, the National Librarian sought the views of the library community on NLC's future role and established its priorities in a 1979 document: "The Future of the National Library of Canada". However, we found no current long-term strategic plans specifically intended to guide Library managers. A Strategic Overview submission was prepared for the Minister in 1982, but it was not designed as a long-term statement for Library managers of what senior management intended to achieve, nor did it cover important strategic issues such as book preservation, the future of the union catalogues, library automation technology or the question of charging for services in Canadian library networks. In 1983, no input to the Minister's Strategic Overview was produced, apparently because the Minister's office did not require an NLC submission.

14.72 We expected, for example, that plans to achieve the Library's main objective "to facilitate the use of the library resources of the country" would include compiling and maintaining inventories of the major Canadian library resources, such as the principal libraries and collections, computer databases available to the public and library locator tools. With Canada's economy becoming more information-dependent, librarians are in a unique position to identify publicly available information sources, document resource availability and play active roles as brokers, bringing together sources of information and users.

14.73 The future direction of NLC may be clear at the level of National Librarian and Associate National Librarian; however formal statements of long-term plans help to ensure that branch managers have the same understanding of organizational objectives and their relative importance, how these are to be accomplished and how performance is to be assessed. Annually up-dating long-term plans is a self-disciplining process. It encourages management to detect and articulate emerging problems and to determine the current expectations of the library community. Issues and the action to be taken to deal with them should become progressively better known through successive annual planning. Documented strategic plans demonstrate the breadth and quality of top management's

recognition of problems facing the Library and provide a basis for performance accountability, specifically through information for Parliament in Part III of the Estimates.

14.74 To the extent that the Strategic Overview submission for the Minister is not intended to be a strategic plan to guide Library managers, we would expect senior management to produce long-term plans that meet the needs of managers.

14.75 The Library's preparation of the 1983 Multi-Year Operational Plans was satisfactory. However, it appears that Library managers regard operational plans for central agencies as the means of justifying resource claims to those agencies but not as useful operating plans for themselves.

14.76 We found that the Library did not have an integrated planning and control structure for developing strategic and operational plans, through which management could be expected to identify and deal systematically with important issues, consider alternatives for achieving objectives, ensure adequate peer review of managers' planning proposals and their implications for the other units, and define the performance control processes at the senior management level.

14.77 The National Library Advisory Board acts as a central link with the library community, which is affected by what NLC plans to do or not to do. Annual review by the Board of management's strategic and operational plans would help both the quality and acceptance of planning decisions by Library management. The Board's role is discussed later.

14.78 The National Library should establish an integrated planning and control structure for all levels for which formal plans are appropriate.

14.79 Management should develop long-term plans that make clear what NLC intends to achieve, as a guide to managers and as a basis for accountability, and should update them annually. The National Library Advisory Board should review them and give management its views.

National Library response: Work has begun on the development of a comprehensive strategic/operational planning and control structure for the Department. As part of this structure, departmental long-term plans will be updated and subsequently reviewed on an annual basis. Departmental plans will be submitted for review to NLAB as appropriate. The advice of the Office of the Comptroller General has been requested in adapting strategic and operational planning techniques and systems developed for large departments to the needs of a small agency. Planning sessions have been held for several years to ensure input from all areas of the Library.

Administrative and Evaluation Functions Managed by the Public Archives of Canada

14.80 Program Evaluation, Internal Audit, Financial Services, Personnel and Administrative Services are managed by The Public Archives. Our observations on these functions are set out in Chapter 15. However, we reviewed the aspects of performance measurement for which the National Library management is responsible.

14.81 Program evaluation. The purpose of this part of the audit was to determine whether the joint program evaluation unit was satisfactorily managed to evaluate the programs of the Public Archives and National Library. We reviewed the Program Planning and Evaluation group's management and reporting practices.

14.82 In our view, management of program evaluation was reasonable in the circumstances. Initially ambitious plans for NLC program coverage, which led to significant slippages in schedules, have been revised and made more realistic, taking into account the existing resources. The number of evaluations originally scheduled has been reduced to match a reduced number of formal program evaluation components so that they can be covered in the five-year cycle suggested by the Office of the Comptroller General.

14.83 In 1982, NLC completed an evaluation of the legal deposit program. Both the evaluation assessment and the study itself were, in our view, adequate. We understand that the Library chose legal deposit in part because it was a relatively simple assignment to use for the Library's first attempt. Part III of the Estimates section on program effectiveness indicates that library services are the most important area for program effectiveness evaluation. Library services are prominent in the Library's 1983-84 evaluation plan. We would expect management to continue to concentrate on library services in formulating its long-term evaluation plan.

14.84 Efficiency. Treasury Board's 1976 policy statement required departments to establish ways of routinely measuring ongoing performance of operations in terms of effectiveness and efficiency. In 1979, the Council of Federal Libraries' Working Group on Performance Measurement published a handbook that included guidelines to facilitate the use of performance measurement techniques. Some major problems identified were the lack of library performance standards and the difficulty of comparing costs.

14.85 Since NLC played a strong role in activities on the CFL Working Group, we had expected to find prompt action in meeting Treasury Board's requirements and following up on the 1979 CFL Handbook, but did not. We have noted our concerns to senior management.

Reporting to Parliament

14.86 Library Estimates for Parliament for 1983-84 were presented in Part III form for the first time. Treasury Board requires Part III to provide Members of Parliament

sufficient information for a basic understanding of the Library program and its objectives, details of planned and actual results and related expenditures, and other performance information useful in the Estimates review. We reviewed the Library's Part III Estimates for compliance with Treasury Board instructions for its preparation and for completeness and timeliness, management control over reliability of information supplied by the Branches, and the avoidance of possibly misleading information.

14.87 We found the Library's Part III to be a reasonable first effort that generally complied with Treasury Board's requirements. The main problems were the usual ones for management preparing the department's first Part III: specifying objectives in terms of results to be achieved by the Library and choosing and describing the most useful performance indicators. The Library's Part III was weak in disclosing the assumptions or other support for expected 1983-84 workloads and there were no Library-wide guidelines or systems in place for preparation and review of the information. The Part III Estimates were not reviewed by internal audit.

14.88 Our detailed observations on the information in each section of Part III and the adequacy of internal controls over reliability of the information have been given to management. Our concerns and recommendation for more specific objectives statements allowing better accountability for results were set out in the Mandate section of this chapter. Other recommendations in the Chapter also could help improve the quality of the Part III Estimates.

14.89 **Management should specify standards and guidelines for development of Part III Estimates information by the branches and for verifying information supplied, especially the basis for projections or forecasts. Internal Audit should include, in its regular work, review of the information in Part III and the underlying systems and procedures generating information for the Estimates.**

National Library response: Such standards are now being developed by the departmental interbranch planning committee, and will be applied in Main Estimates Part III for 1984-85. These standards will be revised each year until the content and format of the Expenditure Plan has stabilized across the federal government and a Performance Measurement System is functioning effectively across all branches of NLC. In addition, the staff of the Public Archives, who provide internal audit services to the National Library, will be requested to schedule regular routine audits of the functioning of all new resource management systems introduced by the central agencies until these systems stabilize.

The National Library Advisory Board

14.90 The National Library Act (1969) sets out the role of the Board as follows:

to advise and assist the National Librarian in the organization and development of the Library and to advise and assist in the development of the

relations of the Library with other libraries and library and educational associations and institutions.

14.91 The 18-member Board, which generally meets twice a year, comprises librarians, scholars, publishers, writers and representatives of certain organizations designated in the Act. Regional representation and language are factors in the choice of members. Appointments, including that of Chairman, are made by Cabinet on the recommendation of the Minister, to whom the National Librarian makes suggestions. In essence, the Board provides advice on matters the National Librarian puts before it, on proposals by committees of the Board which deal with problems in specific areas of the Library's work, and on matters raised on the initiative of Board members.

14.92 The Board's effectiveness depends on having a well-defined purpose. However, the 1969 Act does not define "advise and assist", and the Board's own procedural documents do not set out what it is meant to achieve. In reply to a 1982 parliamentary question, the Parliamentary Secretary to the Minister of Communications described the Board's advisory role, in part, as "advising on and reviewing the priorities of the Library, its developments and its ongoing activities". We believe the issue of interest to Parliament is the purpose of the Board's review function and what it should encompass. The staff resources and out-of-pocket costs annually invested in the Board and its three committees are significant, but our main concern is whether the Board's review role is as strong as it can reasonably be expected to be, within the advisory mandate, to enhance value for money in the Library's operations and NLC's accountability.

14.93 Our approach was to understand the Board's development and present operation in order to assess the usefulness of its role in the management and accountability structure of the Library. It was not our intention to audit the operations of the Board against pre-determined criteria and report findings. We also recognize the difference between the advisory role of NLC's Board and the executive or management function of boards such as the Board of Trustees of the National Museums of Canada or the British Library Board. Our review included attendance at a Board meeting, review of Board minutes and documents, discussions with persons knowledgeable about the Board and other like Boards, and relevant management literature reviews.

14.94 We believe that three matters are relevant to what Parliament could expect from the Board. The first is that the National Library serves mainly other libraries. It does not have the direct contact with the public that university and public libraries have, making its performance difficult to observe. It is therefore important that the Board's review role be substantial.

14.95 The second matter is the relatively little contact the Minister of Communications has with the Library. Section 4 of the Library Act, new in 1969, states that the Minister shall "preside over" and "has the supervision of the management and direction of the Library". The fact that the Minister of Communications has several other cultural agencies and the Department itself reporting to him, combined with the relatively

small size of NLC's budget, suggests that the minister concerned could not be expected to allot much time to the Library. In fact, meetings with the National Librarian are few. This suggests further the usefulness of a strengthened review role for the Board.

14.96 The third factor is the rapid change in information technology and its cost. This affects NLC's planning and decision structures, the cost and percentage of Library resources needed for technological investment, the need to co-ordinate NLC's technology with other organizations, and the effect of technological change on the types and forms of delivery of library services. These are factors that call for review by Board members knowledgeable not only about library affairs and technology but also sound management practices.

14.97 We believe there is a need for the Board, in advising the National Librarian, to have:

- a clearly-defined review role;
- members capable of constructively criticizing plans, budgets and reported progress for key Library functions and projects; and
- direct access to the Minister when the Board thinks it is needed.

14.98 Because the National Librarian retires from office in 1983 and the Board has a new Chairman, it would seem an appropriate time for the Board to review its role and mandate and its responsibilities related to the Minister. This review would benefit from taking into account the views of the library community before the Board makes recommendations to the National Librarian and the Minister.

14.99 The National Librarian and the Board should review the role of the Board in the management and accountability structure of the Library and discuss with the Minister the role and operating guidelines they think the Board should have.

National Library response: Subsequent to the arrival of the new National Librarian, the present role which the Board plays will be reviewed and discussed with members and with the Minister, as appropriate.

14.100 We have offered suggestions for Board operating guidelines for consideration by Board members, the National Librarian and the Minister. Assuming that the guidelines may be relevant to other boards in government, we are including a summary of them on the following pages.

**Suggested Operating Guidelines for the National Library Advisory Board
(For Consideration by the Board, National Librarian and Minister)**

Board Objectives and Accountability

14.101 Formal statements by the Board should document the consensus reached by the Board members, the National Librarian and the Minister on what the Board is to accomplish, what its powers are, and how and to whom it is to report its concerns and accomplishments.

Appointment to the Board and its Committees

14.102 Guidelines should be developed covering criteria and processes for making appointments to the Board and its committees. They should have the support of the Minister and the library community. These guidelines would be reviewed periodically and would ensure that for each main task of the Board there will be members with relevant knowledge. For example, when the Library plans a major multi-year project, membership on the Board or a Board committee specifically related to the project would include one or more persons able to provide sound review and critical questions about the project. Financial and management experience would also be a factor in selection of Board members.

Board Tasks

14.103 The Board's role should include at least these functions:

- conveying to NLC management the views and suggestions of key stakeholder groups with whom Board members are in contact, and conveying to Library clientele and others what NLC is trying to accomplish;
- reviewing National Library strategic and operating plans and priorities and their cost implications, and the results achieved, including NLC's program evaluations;
- reviewing major projects or studies, aided by current information from staff on cost and other implications of project plans, including progress achieved and the reasons for variances;
- recommending to the Minister criteria for the appointment and tenure of the National Librarian; and
- advising the Minister on any matter the Board deems important enough to warrant direct and timely communication of its concern.

Board Structure and Management

14.104 Respective roles and responsibilities of the Chairman and Secretary and the Steering Committee and Board committees should be set out in Board operating guidelines

and periodically reviewed by the Board. The guidelines would be used for staffing these roles and setting terms of reference for Board committees.

14.105 The Board should have a process in place to:

- plan the work of the Board and its committees, including determining the information needed, how the work is to be accomplished, and timetables;
- determine how the work of its committees is to be assessed and how its own work and that of its committees is to be reported; and
- establish the frequency and agendas of meetings and ensure the best use of limited meeting time.

Review of Board Mandate

14.106 The Board's purpose, operating mandate and procedures should be reviewed by the Board, the Minister and the National Librarian at appropriate intervals as the Library's operating environment and service needs change. Changes in the Board's terms of reference and member appointment guidelines should be documented and approved by the Minister.

PUBLIC ARCHIVES OF CANADA

PUBLIC ARCHIVES OF CANADA

Table of Contents

	Paragraph	Page
SYNOPSIS	15.1	461
Scope	15.18	465
Observations and Recommendations		
The Archives		
Mandate	15.22	465
Acquisition Policy	15.25	466
Acquisition of Federal Archives	15.29	466
Preservation	15.33	467
Archives Control	15.41	469
Automated Systems	15.47	470
Records Management		
Evaluation of Records Management in Government	15.52	471
Service to Departments	15.64	474
Improvement in Methods of Operation	15.73	477
Records Storage Facilities	15.75	477
Central Microfilm Operations	15.76	477
Planning and Control at the Executive Level	15.78	478
Departmental Administration		
Administrative Services	15.81	478
Financial Services	15.89	480
Personnel Services	15.90	480
Internal Audit	15.91	480
Program Evaluation	15.94	481
Reporting to Parliament	15.97	481
Exhibits		
15.1 Summary Organization Chart		463
15.2 Records Management in Government		472

PUBLIC ARCHIVES OF CANADA

SYNOPSIS

Overview

15.1 Canada's national archives, established in 1872, has both cultural and administrative roles. Its historical holdings, the most important archival resource in Canada for documents of all kinds, are used extensively for scholarly research, illustration of books and magazines, film and television productions, local and geneological research and, increasingly, by government officials. Through its administrative role in the management of government records, the Archives influences the quality and quantity of government records flowing into the Archives from departments and agencies (and some Crown corporations) and encourages economy and efficiency in records management across government. The Public Archives of Canada has served as a model for structuring provincial government archives and has been studied with interest by foreign governments.

15.2 The Public Archives is by far the largest archival institution in Canada. The Archives' expenditures constitute 60 per cent of all moneys devoted to archives in Canada, and its staff represent over 40 per cent of all archival staff in Canada. It has provided archival leadership for many years in training and in developing finding aids and specialized techniques for preserving various media, including manuscripts, maps, photographs, film and sound records, and machine-readable records. The Records Management Branch has played an equivalent role in government records management.

15.3 The Archives must respond to several developments within the Canadian archival community: increasing expectations for involvement by the Public Archives in the development of provincial and national networks, including technical help and information exchange, and the need to deal with issues such as deciding what type of archival material should be acquired by what archives and where it is best located.

15.4 The Public Archives has operated under the same Act for over 70 years, but is now working with the Minister of Communications on a proposal for a new Archives Act. One of management's key objectives is to secure statutory support for its administrative mandate in government records management. At present, it is based on a 1966 Order in Council and on Treasury Board's Administrative Policy Manual, delegating records management responsibilities to the Archives.

15.5 Good records management in government is essential not only for ensuring that historically valuable records are identified and directed to the Archives, but also for ensuring that records are organized to support government operations, including the need for prompt access under the new access to information legislation. Moreover, the financial and human resources spent in government on generating and storing files and records of all

kinds – paper, magnetic tape and microfilm – place a strong value-for-money responsibility on the Archives as well as on departmental management.

15.6 The Archives' objective statement in the 1983-84 Estimates is:

the systematic preservation of government and private records of Canadian national significance in order to facilitate not only the effective and efficient operation of the Government of Canada and historical research in all aspects of the Canadian experience, but also the protection of rights and the enhancement of a sense of national identity based on archives as the collective memory of the nation.

15.7 The Archives plans net expenditure in 1983-84 of \$36.1 million, using 795 person-years. This includes, in the Departmental Administration budget, providing several joint departmental functions serving both the Public Archives and the National Library. The two organizations share a headquarters building in Ottawa.

15.8 The Archives' organization chart, subsequent to 31 March 1983 when certain units were reorganized, is set out in Exhibit 15.1. It has no advisory board, but the Dominion Archivist is suggesting that provision be made in a new Act for such a board.

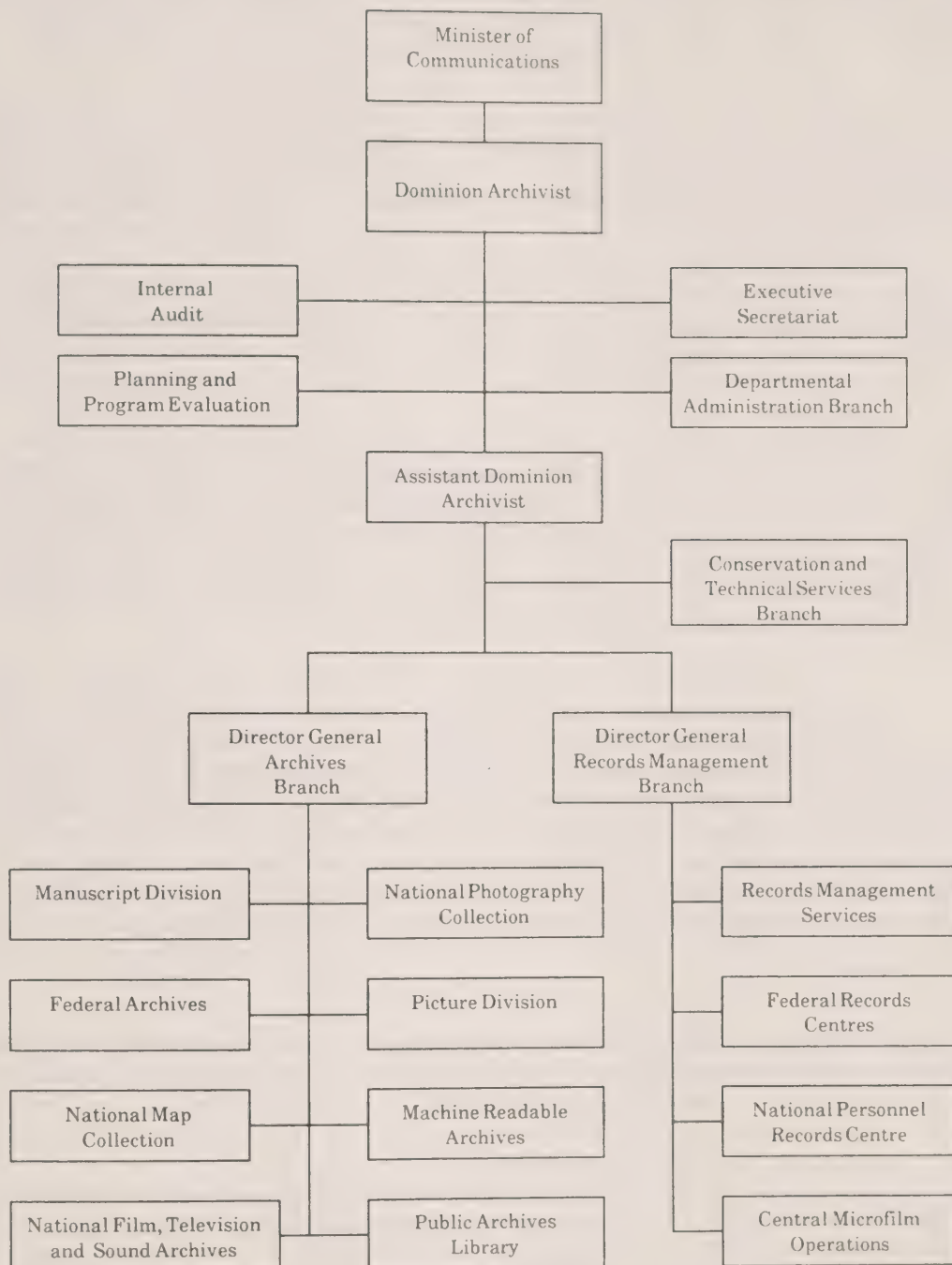
Summary of Audit Observations

15.9 The Archives. About 16 million items have been acquired from both private and government sources by eight Divisions of the Archives Branch specializing in a variety of media and record types. However, the Divisions and the Branch as a whole did not have explicit approved acquisition policies and written criteria to guide archivists in selecting and appraising materials. This has become important in recent years with the growth of other archival institutions, changing patterns of user needs and resource limitations. Management is in the process of developing Branch acquisition policy.

15.10 For accountability to Parliament, the objectives statements of the Archives in its Part III Estimates do not make clear enough the Public Archives' intention with respect to determining its archival role in relation to that of other archival institutions in Canada.

15.11 Federal government records are acquired most often as a result of departments and agencies applying systematic retention and disposal schedules to records they hold. These schedules are approved by the Dominion Archivist and have been mandatory for departments since 1966. Because compliance has been weak – 19 per cent of departments surveyed by the Public Archives in 1983 had no schedules and only 52 per cent had a majority of their records scheduled – the risk is high that valuable records will be lost.

**PUBLIC ARCHIVES OF CANADA
SUMMARY ORGANIZATION CHART - 1 APRIL 1983**



15.12 Preservation. The Public Archives is responsible for the long-term preservation of the records entrusted to it and has created and successfully applied a variety of methods and technologies for various media. However, management's knowledge of the present physical condition of its collections and of requirements for preservation has not been adequate for planning and control purposes. Preservation activities have been carried out independently by the eight Divisions of the Archives Branch, and the Conservation and Technical Services Branch, without benefit of branch co-ordination or strategic planning.

15.13 Archives control. The physical location, nature and descriptions of materials held by the Archives Branch are recorded in a wide variety of registers, catalogues, finding aids and other locator tools maintained by the Divisions. The efficiency and quality of Archives Branch service to clients depend on having appropriate descriptive information at each level of detail sought by the user, from the most general description at the collection level to the most detailed description at the level of an individual archival item. We found that the Branch lacked standards for determining the appropriate descriptive information for each level.

15.14 Automated systems. Although the Archives Branch is a major federal information agency, with responsibility for about 16 million records, it has made only limited use of computer technology. In 1982, the Branch initiated a project to assess feasibility and develop a plan for implementing a computer-based control system. However, this project had not specifically provided for assessing the needs of the Archives as a whole or client needs, nor had the Branch reviewed problems experienced in managing similar projects in other agencies, such as the National Library.

15.15 Records management. Although the Archives has provided advice and training in records management practices, as well as storage facilities for departments' dormant records, the Archives has not carried out fully its mandate under the 1966 Order in Council to evaluate and report annually to Treasury Board on records management in government. Systematic assessment is needed to detect trends and identify the underlying causes and effects of weaknesses so that Treasury Board can take corrective action. Chapter 460 of Treasury Board's Administrative Policy Manual now provides for cyclical evaluation of departments by the Archives, over a five-year period, with annual reporting to Treasury Board.

15.16 Departmental records managers we interviewed expressed strong satisfaction with most services of the Records Management Branch and, in our view, the Federal Record Centres provide economical records storage facilities.

15.17 The Branch lacked a systematic plan for identifying user needs as a basis for planning for more cost-effective records management in government. Although Treasury Board's most recent directive states that advice on automating records management is available from the Public Archives, the Archives, in our opinion, does not yet have this capability.

Audit Scope

15.18 We first identified basic processes in the operations of the Archives that we believe are central to meeting its program objectives. We then assessed management controls over these key processes or functions, and management's accountability reporting to Parliament.

15.19 In the Archives Branch, the key functions suggested by our preliminary survey were acquisition and control of records, preservation, and technology support. These four functions are central to the service provided by each of the Divisions. The Records Management Branch was the other main operation reviewed, and included the Central Microfilm Operations.

15.20 In addition, we reviewed the following evaluation and support functions managed by the Public Archives for both the Archives and the National Library: Internal Audit, Program Evaluation, Financial and Administrative Services and Personnel Services.

15.21 For each scope area, we established and agreed with management the criteria to be used to assess whether planning and management controls demonstrated due regard for value for money and compliance with accountability obligations.

Observations and Recommendations

The Archives

15.22 **Mandate.** The Archives operates under the combination of a 1912 statute, a 1966 Order in Council and a series of chapters in Treasury Board's Administrative Policy Manual. In our view, management's formal objectives statement set out in the 1983-84 Estimates is consistent with these authorities and, for accountability and program effectiveness evaluation, describes a specific objective: "the systematic preservation of government and private records of Canadian national significance." This is intended to include, through sound records management, the preservation of records still in the hands of departments and agencies.

15.23 However, "national significance" needs definition, since other archives presumably will collect items of national interest. Further, "systematic preservation" does not make it clear whether the Archives also intends to help other archival institutions to acquire and preserve materials, in the sense of trying to ensure that every nationally significant record is safeguarded by some archival institution in Canada. Although the statement of objectives appears to accommodate this interpretation, accountability to Parliament suggests that management should make clear the scope of the Archives' program intentions. Part III of the Estimates refers to the Public Archives' help to other archives in matters such as training, but it says nothing about whether management

intends to help facilitate acquisitions by other archives, and it does not clarify the meaning of "national significance".

15.24 In Part III of the Estimates of the Public Archives, management should clarify, to the extent possible, the meaning of "the systematic preservation of government and private records of Canadian national significance".

Archives' response: Part III Estimates for 1984-85 will attempt to clarify the objectives of the Public Archives of Canada.

15.25 **Acquisition policy.** Archival records are acquired by eight Divisions in the Archives Branch, each dealing with a particular type or medium (see Exhibit 15.1). In this context, "records" include photographs, maps, architectural drawings, motion picture films, sound recordings, videotapes, computer tapes, paintings, medals and books, in addition to traditional manuscripts and other textual records. Under the Archives Act (Section 8), the Dominion Archivist may acquire any materials he deems to be appropriate for the Public Archives.

15.26 Given the continuing growth in the numbers and diversity of records in both the federal and private sectors and the limited space that the Archives has to store materials, we expected that management would interpret its mandate through cohesive acquisition policies for the Divisions. These would reflect the Archives' collecting role in relation to that of other archival institutions and would help ensure, over the long term, that the most significant records would be acquired.

15.27 Most Divisions did not have explicit acquisition policies in place; none had been approved by Branch management, and there was no acquisition policy statement for the Archives Branch as a whole. To help ensure consistency of collection strategy over time and between Divisions, archivists should be guided by approved selection and appraisal criteria when making acquisitions, but we found that these also were lacking.

15.28 We recognize that professional judgement is central to discretionary acquisitions; however, changing client needs and scarce resources require the application of at least broad criteria. At the time of our audit, Branch management had begun a study of acquisition policy and was compiling and analysing draft statements prepared by the Divisions.

15.29 **Acquisition of Federal Archives.** The Federal Archives Division identifies records of historical value created in departments and agencies of the federal government. The thoroughness and efficiency of this process depend on appropriately timed reviews by archivists, resulting from records retention and disposal schedules set by the departments. All schedules must be approved by the Dominion Archivist. If they are not established and applied, there is a high risk that, among other consequences, the archival records will not be transferred to and safeguarded by the Public Archives. A specific risk is destruction of

records without the Archives' knowledge. Treasury Board, in chapter 460 of its Administrative Policy Manual, requires departments and agencies to obtain the Dominion Archivist's approval before destroying records. But there are no legislative or central agency sanctions for departments if they ignore this requirement.

15.30 Formal scheduling of records – specifying how long they will be kept in active and dormant status, and when and how they will be disposed of – has been mandatory for federal departments and agencies since 1966. It helps departments to operate more efficiently and also assists in identifying archival material. However, a survey conducted by the Archives during 1982-83 of 62 departments showed that compliance has been weak: 19 per cent had no schedules; only 52 per cent had a majority of their operational records scheduled; and computer records, photographs, maps and other non-textual materials had usually been excluded from schedules. Consequently, the Public Archives is not able to examine systematically, for archival purposes, a significant number of federal records. The Archives' evaluation of departmental records management is dealt with later, in the section on Records Management.

15.31 In 1979, the Federal Archives Division evaluated alternative approaches to acquiring federal records. It concluded that applying records schedules would yield the best results, assuming a reasonable degree of compliance by departments. However, as noted above, the 1982-83 survey showed a low level of compliance and, unless improvements are forthcoming, the Archives' strategy may not be adequate by itself.

15.32 The Public Archives should assess the risk to its acquisitions program posed by the current levels of departmental compliance in records scheduling and the implications for its strategy for acquiring federal archival records.

Archives' response: In 1984, the Archives Branch will complete a review of the effectiveness of the scheduling process for written documents and for machine-readable, photographic and cartographic records.

15.33 **Preservation.** The Public Archives is responsible for preserving the records in its care. To safeguard these assets, a wide range of methods is necessary, including means for ensuring security, preventing or dealing with disasters, controlling environmental conditions, conserving and restoring materials and preserving information content. Threats can range from those of immediate and visible concern, such as vandalism and fire, to others that are more subtle but, in the long term, more significant, such as the effects on archival material of atmospheric pollutants, temperature and light.

15.34 To meet its responsibility for preservation, the Archives could be expected to have a strategic plan for preservation that would reflect assessment of risks to its collection and provide guidance to managers for determining priorities and assessing the cost-effectiveness of current activities and assignment of responsibilities. Preservation activity would be co-ordinated, and overall responsibility for preservation would be assigned at a senior level. In brief, a departmental preservation program would be required.

15.35 The Archives has taken steps in a number of preservation aspects. It is developing mass deacidification processes for conserving paper records, employing microfilming to preserve the content of paper records, and subjecting magnetic tapes to regular maintenance routines. The Archives has systematically planned its space needs. The headquarters building in Ottawa provides, by archival standards, excellent environmental conditions, but it can accommodate only about 50 per cent of the archival records.

15.36 Branch preservation activities are managed independently by the eight Division directors, who are each responsible for their own records. The Conservation and Technical Services Branch provides services to the Divisions but does not plan or co-ordinate activities for them or the Archives Branch as a whole. Environmental controls and security are the responsibility of the Administrative Services Division. There is no overall plan or goals for preservation activities against which achievements could be measured. No one person is specifically accountable for preservation activities in the Public Archives.

15.37 Day-to-day storage and handling of records appeared generally satisfactory; however, managers in all Divisions but one lacked current factual information on the physical condition of their collections. Thus, overall requirements for preservation cannot be determined, nor can the adequacy of current activities be assessed.

15.38 A number of preservation problems were evident. The techniques developed by the Archives for removing harmful acids from paper can deal with only a fraction of the millions of items needing treatment. At present, the Archives' equipment must also serve the National Library, and the effectiveness of the process for treating manuscripts, as opposed to books, has not been fully assessed. The risks of using storage areas with sub-standard environmental controls – areas lacking combined temperature and humidity controls – have not been evaluated, yet 50 per cent of the Archives' materials are stored in such areas. Guidelines to ensure preservation of magnetic tapes and other computer records are lacking, and research on long-term solutions, in the face of these problems, appears inadequate. The main effort for 1983-84 is videodisc research and development, with resources of \$80,000 and 1 person-year designated.

15.39 All Divisions of the Archives Branch have developed disaster preparedness plans, but, at the time of our audit, they had yet to be approved by senior management. We noted certain weaknesses in security; these are discussed later in the section of this chapter under Administrative Services. In addition, we found that a departmental EDP security policy, required by Treasury Board, was not in place.

15.40 Public Archives should assess the adequacy of the resources, organization and planning committed to the preservation of its archival records. Responsibility for preservation activities should be assigned at a senior

management level. A strategic plan should reflect what is at risk and make clear the resources the Archives intends to apply to preservation.

Archives' response: The departmental strategic plan calls for the development of a comprehensive conservation program to be in place by 1987. The Archives will conduct a survey on the condition of documents, identify requirements and set priorities in 1984. The Conservation and Technical Services Branch will determine the resources needed to meet the requirements and make recommendations to the Senior Management Committee in 1985. The Senior Management Committee will determine acceptable levels of preservation activity and assign resources and program responsibility.

15.41 Archives control. To locate and provide access to their records, Archives Branch Divisions register, classify, catalogue and describe incoming materials. We looked for formal standards for timeliness, content and completeness in describing archival records to assess their reasonableness for management control purposes.

15.42 Most archival materials are catalogued at a number of levels of descriptive detail, ranging from a single general description of a collection comprising, perhaps, thousands of items, to individual annotations for individual items. Between these levels there may be groups, series, or other categories of description. User finding aids and management's knowledge of what is in the collection depend on the adequacy of the descriptions. This, in turn, is a function of standards.

15.43 We found, however, that most Divisions lacked formal, written definitions and standards for the levels recognized. None had been approved by Branch management, and management had no stated norms for physical control (where items are located) and intellectual control (what the items are).

15.44 Control at the most general level, that of collections, appears to be adequate. All Divisions but one stated that collections received were registered (named as a collection, listed and location specified) within days or weeks of receipt. However, there appear to be weaknesses in control at more detailed levels of description, as illustrated by the following information obtained from the Divisions:

- Federal Archives: Coverage of materials at the 3 recognized levels of control is estimated as 100 per cent at the most general or "inventory" level, as 70 to 90 per cent at the "file lists" level, and as 5 to 20 per cent at the detailed "finding aids" level. Computer-produced subject indexes cover only 2 to 10 per cent of the records. These are produced regularly only for the Federal Archives Division.
- Manuscript Division: Most sections have major backlogs of materials lacking inventory descriptions or finding aids.

- National Photography Collection: A card catalogue of about 100,000-150,000 entries is used to deal with a collection of about 9 million photographs.
- Public Archives Library: About 40 per cent of the collection of approximately 280,000 items is uncatalogued.
- Picture Division: Only about 10,000 of the 100,000 items in the collection are referenced in the card catalogue.

15.45 Without standards set by senior management for the nature and extent of information required, management control is less likely and we cannot assess whether the degree of operating control at the divisional level, reflected by these examples, is adequate to meet the Archives' objectives for the preservation and use of records.

15.46 **The Archives Branch should approve or develop, as necessary, standards for the description of archival records held by each Division.**

Archives' response: When the necessary levels of description have been identified, the Archives Branch will undertake, in 1984, to develop standards for each level of description and for each type of archival record.

15.47 **Automated systems.** The Archives Branch is a major federal information agency, responsible for the custody of about 16 million records including, for example, about 46 kilometres of shelf space for paper records, 9 million photographs and 1 million maps. It provides the public with services involving several million items of information and inquiries annually. We expected that the Archives would have formally investigated and evaluated, during the past 10 years, the possible application of automated systems to help improve the overall control of its archival materials, support management functions and enhance the quality and efficiency of client services.

15.48 A feasibility study and planning exercise for the use of computers in the Branch as a whole did not begin until 1982, although several Divisions had taken independent initiatives, and one was using an automated system for physical control of records.

15.49 The feasibility study, to be completed by mid-1984, will define the individual needs of the eight Divisions and will review Branch-level objectives and issues. However, it is not clear from the study's documentation whether this includes an analysis of the needs of Branch clients. Consideration of the needs of the Archives Branch as a whole does not appear in the study's terms of reference. Given the projected scope of the system(s), we would expect the Archives to consider, for example, whether the resulting database should include records of other archival institutions, whether on-line access to the database by external clients should be granted, whether products and services for other Canadian archives should be offered, and whether the system(s) should support Branch programs for managing its materials; for example, scheduling items for conservation treatment or monitoring their use by clients. We have noted our concerns to management.

15.50 Although the Branch has examined various specific EDP systems used elsewhere with a view to their potential application, Archives management had not looked at the management processes and controls for developing and implementing systems in other comparable organizations, such as the National Library, to take advantage of management lessons learned by others. Of particular concern is the estimation of resources and time required for development.

15.51 In establishing plans, budgets and management controls for developing automated systems in Archives Branch, management should ensure that the experiences of similar projects in comparable organizations are reviewed, and applied where appropriate.

Archives' response: Efforts will be made during the autumn of 1983 to acquire full information about similar automated systems and their management.

Records Management

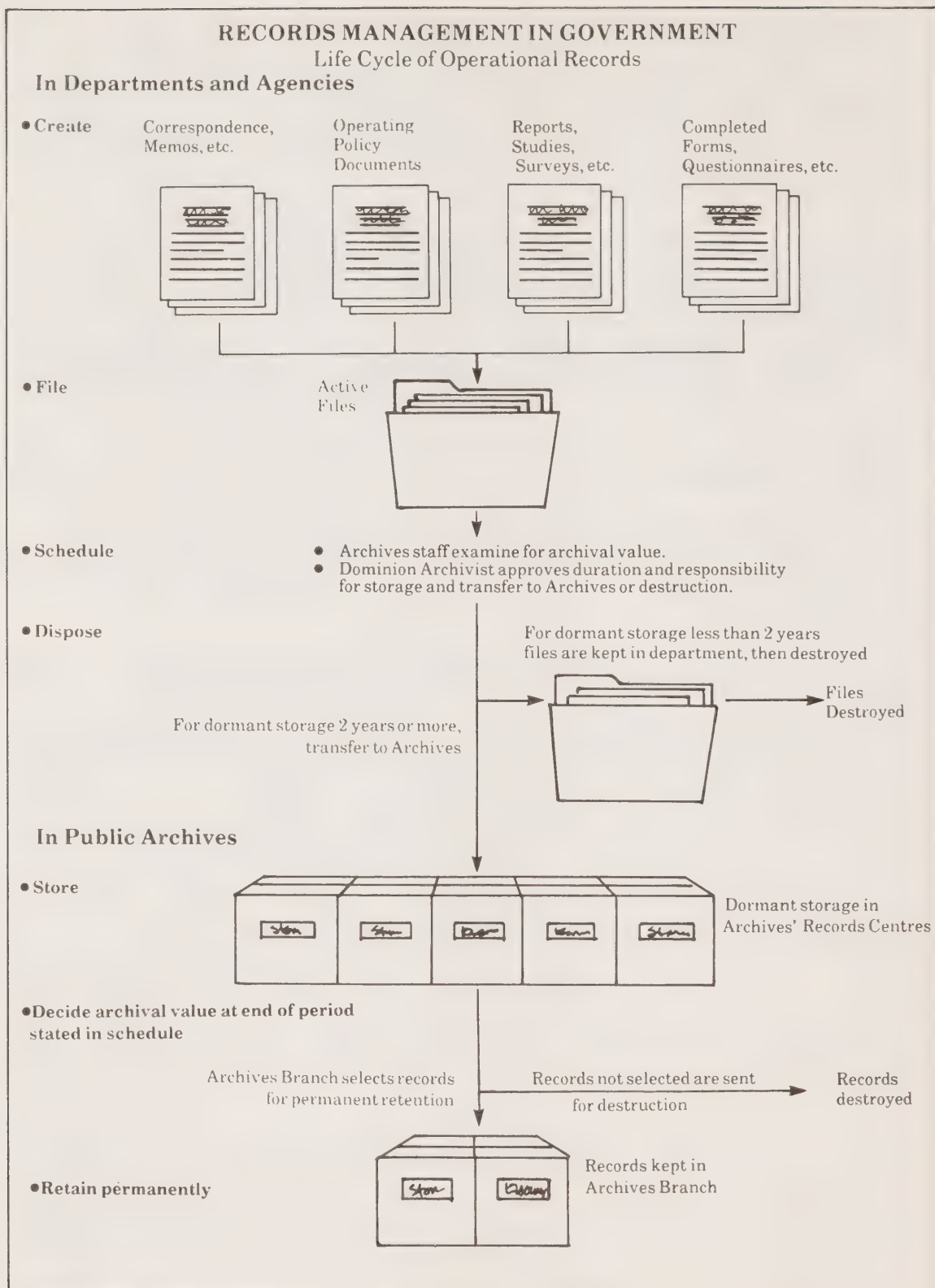
15.52 **Evaluation of records management in government.** A 1966 Order in Council (the Public Records Order), which resulted from Glassco Commission recommendations for improved records management in government, requires the Dominion Archivist to:

- prepare an annual report to the Treasury Board on the activities of departments in the field of records; and
- submit reports to departments whenever he considers there is inadequacy in the management of their records.

15.53 Only three reports have been sent to Treasury Board since the Public Records Order was issued – one in 1967, one in 1968 and another in 1973. At 1 July 1983, the Archives had completed a fourth report on the records management activities of departments but had not yet forwarded it to Treasury Board.

15.54 We noted that the Archives had sent two letters to departments expressing concern about the adequacy of records management. One was sent in 1972, the other in 1981. One department had replied, but there was apparently no response or follow-up to the other letter.

15.55 The Dominion Archivist stated that the use of an Order in Council to introduce records management policy was chosen to test policy feasibility before passing the legislation on records management recommended by the Glassco Commission in the early 1960s. In management's view, systematic comprehensive evaluations and consequent annual reports to Treasury Board proved impracticable, but there was an understanding



with Treasury Board that the Public Archives would keep itself informed concerning records management in government and would tell Treasury Board when action on its part was required. We were unable to find evidence that the Archives had resolved with Treasury Board any problems it had in complying with the Public Records Order.

15.56 Without the type of formal assessment envisaged by the Public Records Order, weak or deteriorating records management practices in departments may not be detected. This could result in higher costs for accommodation and file searching, and increased risk of loss of valuable records to the Archives. In addition, Treasury Board cannot detect lack of due regard for value for money in records management in departments and take corrective action. Compared with the message of the 1973 report, the 1983 report suggests that records retention and disposal scheduling in departments has worsened considerably.

15.57 If Archives management deems it impracticable to carry out fully the records management responsibilities assigned to it from time to time, management should formally resolve with Treasury Board what Archives action is to be taken.

Archives' response: Discussions are already in progress with Treasury Board officials on implementation of records management responsibilities. Decisions will be formally recorded.

15.58 Treasury Board's revised Chapter 460 of its Administrative Policy Manual, issued in March 1983, makes the Archives' evaluation responsibilities more specific. The chapter up-dates and consolidates records management practices to be followed by Schedule A and B departments and agencies. Chapter 460 states that the Public Archives has the responsibility, on behalf of Treasury Board, of "evaluating the records management function of each department or agency at least once every five years in order to assess the effectiveness of the policy, to monitor compliance and to examine the efficiency with which it is implemented". The Archives is to report to Treasury Board annually "on the state of records management in the Government of Canada".

15.59 In our view, while the Records Management Branch had staff experienced in records management, it lacked staff sufficiently experienced to carry out what is essentially a major government-wide evaluation function. Branch management acknowledges the problem and told us that it will consult with Treasury Board on the course of action the Branch will take to effectively carry out the Public Archives' responsibility. This agreement with Treasury Board would include mutual understanding of the use of departmental internal audit findings in records management.

15.60 Viewed broadly, all functions of the Archives relating to federal records depend on sound departmental records management. Yet the Archives' 1983 evaluation report states:

The records management function was not receiving recognition or full top-level management support in departments. As a result, the records management program in many departments was incomplete.

15.61 The Public Archives can provide help and advice on records management and can assess and report, but its influence over the quality of departmental records management across government is limited. Moreover, the Archives cannot control the creation of records or files that are not really needed in the first place. In our view, this is part of a larger issue that our audit of the Archives could not address: information resource management in government.

15.62 Chapter 460 of the Treasury Board Administrative Policy Manual is helpful in consolidating government standards for records management and clarifying departmental and Archives responsibilities. However, the available evidence suggests that the present quality of records management in departments and the low importance attached to it will not assure the systematic flow of valuable records to the Archives, facilitation of public access to government records or the intended economy and efficiency in government operations.

15.63 In our view, the Archives should strive to report to Treasury Board not only its assessments but also the causes of records management problems and their effects, and its recommendations for corrective action. It is equally important that Treasury Board satisfy itself about causes and effects and take appropriate action to help ensure that departments manage their records with due regard for value for money and for the archival value of records.

15.64 **Service to departments.** Departmental records managers interviewed in our limited survey (eight in Ottawa and eight in regions outside Ottawa) were supportive of the Archives' Records Management Branch and expressed strong satisfaction with the level and quality of the Branch's service, including the training courses given by the Branch and attended by not only federal records personnel but also personnel from other levels of government and governments abroad. Some records managers stated that it took too long to get departmental records schedules approved by the Dominion Archivist. The Archives is addressing this problem.

15.65 The revised Treasury Board chapter 460 states that "advice on automating aspects of the records management function is available from the Public Archives." Our interviews with departmental records managers indicated a need for advice on automation, particularly by the smaller departments. Getting this advice can help departments to make better value-for-money decisions on acquiring and implementing automated systems.

15.66 In our view, advice on automation should be provided by an Archives staff having both EDP and records management knowledge and experience. The Archives does

not yet, in our opinion, have the qualified resources to advise adequately on the automation aspect of records management.

15.67 The Public Archives should determine the expertise it needs to advise on the automation of records management functions, resolve with Treasury Board an action plan to achieve the needed level of expertise and communicate its action plan to departments and agencies.

Archives' response: Discussions with Treasury Board officials are being held to prepare an action plan to provide the departments and agencies with needed advice. Departments and agencies will be notified.

15.68 In general, we would have expected the Archives to periodically assess current and future departmental needs for assistance from the Records Management Branch, assess how well it was responding to the need for more cost-effective records management in departments, and take appropriate action.

15.69 We found that the Public Archives had no systematic plan for identifying the needs of users or potential users of its records management services or for assessing how well it responds to these needs. Efforts to date have been primarily in assessing the future needs for paper records storage facilities.

15.70 The Records Management Branch relies on its close working relationship with its clients to forewarn of any deficiencies in its services. Although we recognize the value of this relationship, we believe there is a parallel need for a more formal approach to identifying and assessing user needs. This would help ensure that the right services are offered at the optimum levels of service. Possible needs, in our view, are those relating to improving value for money in government records management in the departments generally, not just those set out in departments' specific requests of the Branch.

15.71 User needs might include:

- Developing a "marketing package" for departmental records managers to help them promote good records management practices throughout their departments.
- Developing a more active role for senior Archives management in promoting good records management practices at the deputy head and assistant deputy head levels in departments. For example, the Archives estimates that, by using the Federal Records Centres, departments saved several millions of dollars in records accommodation costs in 1982-83. Demonstrable resource savings would support the promotion of good records management.
- Establishing a records management research and development capability within the Archives. This is important because there is a risk of a significant



Records for disposal are sorted into different grades of paper quality to yield the best price at the mill.



A 1,200 lb. bale of shredded records on its way to the mill for recycling.

duplication of effort in developing systems to support records management in departments.

15.72 **The Records Management Branch should formally identify and address the current and future needs of departments and agencies with a view to increasing economy, efficiency and effectiveness in records management.**

Archives' response: The Records Management Branch will put emphasis in 1984 on the identification of needs in departments and agencies, and on the development of a stronger research capacity to support records management in departments and agencies.

15.73 **Improvement in methods of operation.** Since April 1979, the Branch has had a performance measurement system that supplies selected performance data to the Director General of the Branch. The Branch's performance controls could be strengthened by having procedures to systematically examine methods of operation in the records centres to see whether improvements could be made. Possibilities would include setting quantifiable targets for cost reduction, establishing standard costs for cost control and creating standard methods of operation across records centres. We have noted our recommendations to management.

15.74 Individual initiatives have been taken in the various records centres, and the Branch now plans to assess methods of operations in records centres to see what degree of standardization of methods is appropriate. A records disposal program was started in 1980 to sort, shred and bale paper for sale to paper mills. This program employs over 50 handicapped people across Canada. The Archives states that it is self-supporting and, further, it has eliminated the large paper disposal backlogs which were the norm before the program began.

15.75 **Records storage facilities.** The Branch has seven regional records centres for low-cost storage of dormant records that are still the property of departments. It also has a centre for storing personnel records of former civilian and military federal employees and former members of the Royal Canadian Mounted Police. As well, there is an essential-records centre for safe storage of records that would be needed to re-establish departmental information in the event of a major disaster. In our opinion, based on our assessment of five centres, the Federal Records Centres provide economical records storage facilities. We suggested to management that it formalize its safety program to improve measures already taken in the Centres' operations.

15.76 **Central Microfilm Operations (CMO).** This facility serves as a microfilming common service for federal government departments and agencies. In 1983, responsibility for CMO was transferred from Departmental Administration to the Records Management Branch. Its expected 1983-84 revenue is \$1.62 million, with budgeted expenditures of \$2.13 million, excluding depreciation. We reviewed its operations principally to establish whether it was operating within approved policies covering CMO's objectives, pricing and

performance reporting. We found that senior management had not defined a pricing policy, financial and other performance objectives for CMO or how performance should be reported.

15.77 **The Public Archives should formally clarify the objectives, pricing policy and financial performance expected of Central Microfilm Operations, including what CMO operating costs are to be taken into account in determining its financial performance. Senior management should specify the performance information it requires to judge the efficiency of CMO.**

Archives' response: The Public Archives is currently reviewing the mandate and scope of activity of CMO. In 1984, performance criteria and a pricing policy will be adopted by Senior Management.

Planning and Control at the Executive Level

15.78 The Archives updates annually a five-year plan setting out for its managers and the Minister the Archives' priorities in the areas covered by the plan. It includes action timetables and specifies which member of senior management is responsible. In addition to being, in effect, a long-term operational plan for managers, it serves as the Archives' Strategic Overview submission to the Minister.

15.79 In our view, the structure and organization for planning input and the management controls at the Senior Management Committee level over the execution of long-term plans were adequate for the Archives' circumstances. The Branches send quarterly performance reports to the Senior Management Committee, and the Planning and Program Evaluation group monitors variances for the Committee which then follows up on them.

15.80 However, the 1983 five-year plan, "Strategic Approaches 1983-88", did not set out what the Archives intends to accomplish in key areas such as acquisitions, audit of departmental records management, or the role management intends the Public Archives to have in an emerging system of Canadian archives. Lack of this information in management's own longer-term planning documents also means that the Archives' Part III Estimates will not reflect this information for parliamentary use and Archives' accountability. We have given management our specific observations and recommendations.

Departmental Administration: Administrative Services

15.81 **Security.** The Public Archives and the National Library contain many irreplaceable items and confidential records. Physical security of these items and records in both entities should be a major concern of Administrative Services. We found no written policies and procedures relating to security in the Archives and the National Library. Administrative Services is in the process of preparing them and has identified the significant security risks.

15.82 We have recommended to management that it ensure that security plans address the major components of security in the two Departments and include provision for periodic reviews of security measures taken to reduce security risks.

15.83 Accommodation. In our view, Archives management of accommodation is giving appropriate consideration to identifying needs and has demonstrated due regard for economy and efficiency. The Archives has an Accommodation Committee, composed of senior departmental managers, and has carried out, using consultants, a detailed and comprehensive study to determine the accommodation needs of the Archives and National Library in the National Capital Region through 1990.

15.84 Exhibitions and publications. Two means of communicating Archives activities are exhibitions and publications. We found no evidence, for either exhibitions or publications, that intended audiences were identified and that objectives were set. There were no estimates of total resources required to produce the exhibitions or the publications. Budgets for exhibitions were set for materials and design only. In the case of publications, costs are significant for printing alone. For example, one of the Archives' recent publications, *Dreams of Empire*, cost \$176,000 to print in the spring of 1982. Sales by the end of May 1983 had recovered only 25 per cent of the printing costs.

15.85 Additional significant costs for both exhibitions and publications, for which we were unable to locate estimates, would include research and writing done by Archives staff, editing and overhead. These costs were distributed among the budgets of a number of cost centres and could not be identified in total.

15.86 Archives management had not evaluated exhibitions or publications in terms of benefits and costs as an aid to achieving more cost-effective exhibitions or publications. Management is currently preparing a policy document and procedures for mounting exhibitions, and, as result of a study initiated by the Archives Branch, the Branch plans to appoint a Branch co-ordinator of publications and to relate Branch publication plans to departmental objectives.

15.87 The Archives should ensure that decisions to mount an exhibition or to publish are based on approved departmental criteria and objectives, identification of target audiences and their needs, and reasonable estimates of the total financial and human resources needed to produce the presentation. Actual costs should be compared to estimates, variances identified and appropriate action taken.

15.88 The Archives should ensure systematic assessment of costs and benefits of exhibitions and publications, including whether they achieved their objectives, and ensure that information from the evaluations is used for decisions on future exhibitions and publications.

Archives' response: Once the policy and procedures on exhibitions are established, mechanisms will be put in place to effect the recommendations for both publications and exhibitions.

Departmental Administration: Financial Services

15.89 Our review of the Financial Services Division disclosed several matters which we brought to the attention of management, with our recommendations. For example:

- fees charged by Archives services (mainly central microfilming) lacked Governor in Council approval;
- the Financial Administration Manuals for both the Archives and the National Library have been in preparation since 1974 and are still incomplete; and
- no systematic financial variance analysis has been carried out by the Division, although its Financial Analysis section has been staffed for over two years to assist with this reporting.

Departmental Administration: Personnel Services

15.90 From our audit work in the management of human resources, two issues arose that were brought to management's attention. These involved the need to address identified problems and the lack of experience of personnel specialists at the working level. We are satisfied that management is taking action on these problems.

Internal Audit

15.91 As part of its regular review of internal audit in government departments, the Office of the Comptroller General (OCG) carried out a Performance Assurance Review of the Internal Audit Directorate in late 1982. It concluded that the Internal Audit Directorate was "generally fulfilling the requirements of the standards for internal audit."

15.92 From our review of the OCG's assessment and report to management, and Internal Audit's policy documents, plans, audit reports and working papers, we concluded that we could place reliance on Archives' internal audit work.

15.93 Our principal concern noted to management, beyond the matters reported by OCG, is that the scope of internal audit work should be expanded to include management planning and accountability reports and certain important projects not currently being audited. The planning and accountability reports would include PEMS documents and Part III of the Estimates.

Program Evaluation

15.94 We reviewed the Program Planning and Evaluation group's management and reporting practices to determine whether the joint program evaluation unit was satisfactorily managed to evaluate the programs of the Public Archives and National Library.

15.95 In our view, management of program evaluation was reasonable in the circumstances. One evaluation has been completed in each of the Public Archives and National Library. Initially ambitious evaluation plans, which led to significant slippages in schedules, have been revised and made more realistic for the existing resources. The number of evaluations originally scheduled has been reduced to coincide with a reduced number of program evaluation components.

15.96 We reviewed the evaluation assessment and study of the Government Records Storage and Reference Service program component and found it to be adequate, considering the newness of the program evaluation unit and the limited resources allotted to it. Our comments on the evaluation in the National Library are noted in Chapter 14.

Reporting to Parliament

15.97 Part III of the Estimates of the Public Archives were issued for the first time with its 1983-84 Estimates. Treasury Board requires Part III to provide Members of Parliament with sufficient information for a basic understanding of the Archives' programs and objectives, details of planned and actual results and related expenditures, and other performance information useful in the Estimates review. We reviewed Part III for compliance with Treasury Board's instructions for preparation, for completeness and timeliness and significant errors or reporting bias, and for management controls over reliability of information supplied by the Branches.

15.98 We found the 1983-84 Part III to be a reasonable first effort that generally complied with Treasury Board requirements. The Program Planning and Evaluation group carried out reviews of reasonableness of Branch information, but there were no guidelines for verifying information supplied. The Part III Estimates were not reviewed by Internal Audit.

15.99 Our detailed observations on the information in each section of Part III and the adequacy of internal controls over reliability of the information have been given to management. Several of our audit recommendations elsewhere in this chapter could also help improve the quality of the Part III, in particular those related to Branch objectives and policies.

15.100 Management should specify standards and guidelines for the Branches in developing Part III Estimates information and for verifying information

supplied, especially the basis for projections or forecasts. Internal Audit should include in its regular work a review of the information in Part III and the underlying systems and procedures generating information for the Estimates.

Archives' response: Archives Senior Management is currently developing guidelines for producing Part III Estimates information and for verifying the information supplied. Subsequent internal audits will do the review recommended.

STATISTICS CANADA

STATISTICS CANADA

Table of Contents

	Paragraph	Page
SYNOPSIS	16.1	487
Background	16.16	490
Audit Scope	16.21	492
Observations and Recommendations		
Credibility	16.24	492
Meeting User Needs	16.58	500
Co-operation of Respondents	16.80	506
Confidentiality	16.85	508
Management Control	16.86	509
Exhibits		
16.1 Organization Chart		490
16.2 Level and Trend of Expenditures		491

STATISTICS CANADA

SYNOPSIS

16.1 Statistics Canada, operating since 1918 under the authority of successive Acts, is a centralized statistical agency and plays a dominant role in Canada's statistical system. The Agency faces a practically unlimited demand for more and better statistics. With limited resources, the demand to produce more data while maintaining the quality of existing data and not placing excessive burdens on businesses and individuals poses a continuing challenge.

16.2 When we began the audit, the Agency was just coming out of a troubled period. There had been four different Chief Statisticians in the previous 10 years, and the Agency had come under attack in both the press and the House of Commons for the quality of its products and its management practices. The Agency has now stabilized and there is a renewed sense of direction and purpose.

16.3 We directed our audit work toward management practices in five key areas which we considered essential to the functioning and effectiveness of Statistics Canada: credibility; meeting user needs; co-operation of respondents; confidentiality; and management controls.

16.4 Based on our review of the Agency's systems and procedures, we observed the following with respect to each audit area.

16.5 **Credibility.** We reviewed the measures taken by the Agency to protect its objectivity and to ensure the reliability of its statistics. With respect to its regularly published statistics, the Agency is taking appropriate steps to preserve its objectivity. With respect to its analytical studies, on which the Agency is placing greater emphasis, a strengthening of controls is needed to ensure that its objectivity is maintained. With respect to the reliability of its data, we found that the Agency had a sound international reputation. The knowledgeable users we contacted were generally satisfied with the reliability of the Agency's products. We were concerned, however, that even knowledgeable users may not always be aware of the limitations of the statistics they are using. The Agency needs to improve some of the underlying processes which contribute to the reliability of its statistics. For example, Statistics Canada lacks a formal quality assurance function; implementation of its policy on quality measurement and disclosure has been uneven; and it has yet to correct persistent underestimations in certain key economic surveys.

16.6 **Meeting user needs.** With respect to meeting user needs, we found that the Agency's product line is certainly relevant. We found no instances where the Agency was

spending significant sums on products that had no identifiable users. However, improvements are needed in the way in which Statistics Canada identifies product gaps, sets objectives and ensures that there is a balance in its programs. The frequency and timeliness of products need to be reviewed periodically in a systematic fashion to ascertain if improvements can be made in certain cases or costs can be saved in others. The Agency's dissemination program should be strengthened through the development of a comprehensive marketing plan.

16.7 Co-operation of respondents. Over the past five years, the Agency has taken significant steps in reducing the response burden placed on individuals and businesses. Our interviews with representatives of key respondent groups showed that the business community was generally satisfied that Statistics Canada's demands for information were no longer excessive. In all subject matter areas we examined, program directors were aware of the need to minimize demands on respondents. We also found evidence that alternative means of obtaining data were being reviewed and used by directors.

16.8 Confidentiality. The Agency is taking satisfactory measures to protect the confidentiality of the responses it receives. Although no system is fail safe, there is a strong awareness at the Agency of the importance of maintaining privacy over individual data.

16.9 Management control. While improvements have been made, there remain substantial opportunities to strengthen management control and reduce costs. Managers are not systematically monitoring and reporting on the performance of their programs. As a result, the Agency lacks systematic information on which to evaluate and improve the key factors affecting the costs and effectiveness of its program: the required reliability of statistics; the frequency of production; the timeliness of release; and the best means of disseminating results.

16.10 Clerks responsible for processing statistical surveys are subject to operational peaks and valleys. Management was not measuring the efficiency of clerical staff in a meaningful way. Furthermore, in many cases, management was staffing divisions for peak-level production in order to meet deadlines without an adequate assessment of the costs of doing so. We found considerable variations in the efficiency of clerical resources at various points in the operating cycle. We tested 130 clerks in two divisions and found that they were operating at an average efficiency level of only 56 per cent throughout the year. We believe that productivity gains could be made through a systematic study of the Agency's current workflows and procedures.

16.11 Classification levels have a major impact on salaries. In 1980, the Agency commissioned the Audit Services Bureau of Supply and Services Canada to conduct an audit of its classification activity. The audit, subsequently accepted by Treasury Board, found that 44 per cent of the 100 positions selected for audit in the National Capital Region were misclassified (38 per cent over-classified and 6 per cent under-classified) and that 47 per cent of the official job descriptions were not consistent with the duties being performed. The

audit report also indicated significant weaknesses in the Agency's monitoring and control of its classification system. Statistics Canada has not yet put in place mechanisms that would prevent these problems from continuing to occur. As well, the potential over-classification of a large number of clerical positions throughout the Agency remains unresolved.

16.12 Generally, in the area of management control, our observations underscore the need to strengthen corporate cohesiveness. There is a tendency for individual directors to operate independently without recognizing the need for trade offs and co-ordination of effort. All the recent independent studies of the Agency as well as senior managers themselves have tended to confirm this. The processes for setting priorities, planning, allocating resources, and holding managers accountable all need further significant improvement.

16.13 In our opinion, the present autonomy given to individual directors should be supported by sufficient central direction and accountability to ensure that directors are working toward common goals. In this manner, the Agency can initiate corrective action across program and organizational lines.

16.14 There is evidence that present management is committed to making improvements. A project on operations integration, which is designed among other objectives to improve the efficiency of staff engaged in processing surveys, has recently commenced. A series of management committees has been formed to oversee activities and develop Agency policies in a number of areas. In addition, a comprehensive management plan has been prepared that seeks to make significant improvements to Agency practices in corporate planning; quality assurance; communications; human resource management; internal audit; program evaluation; and performance measurement. Because of difficulties in staffing, the plan has taken over two years to develop. It was formally approved for implementation in January 1983. Initial results from implementation of corrective action are promising. However, the target date of December 1984 for completion of the plan is ambitious.

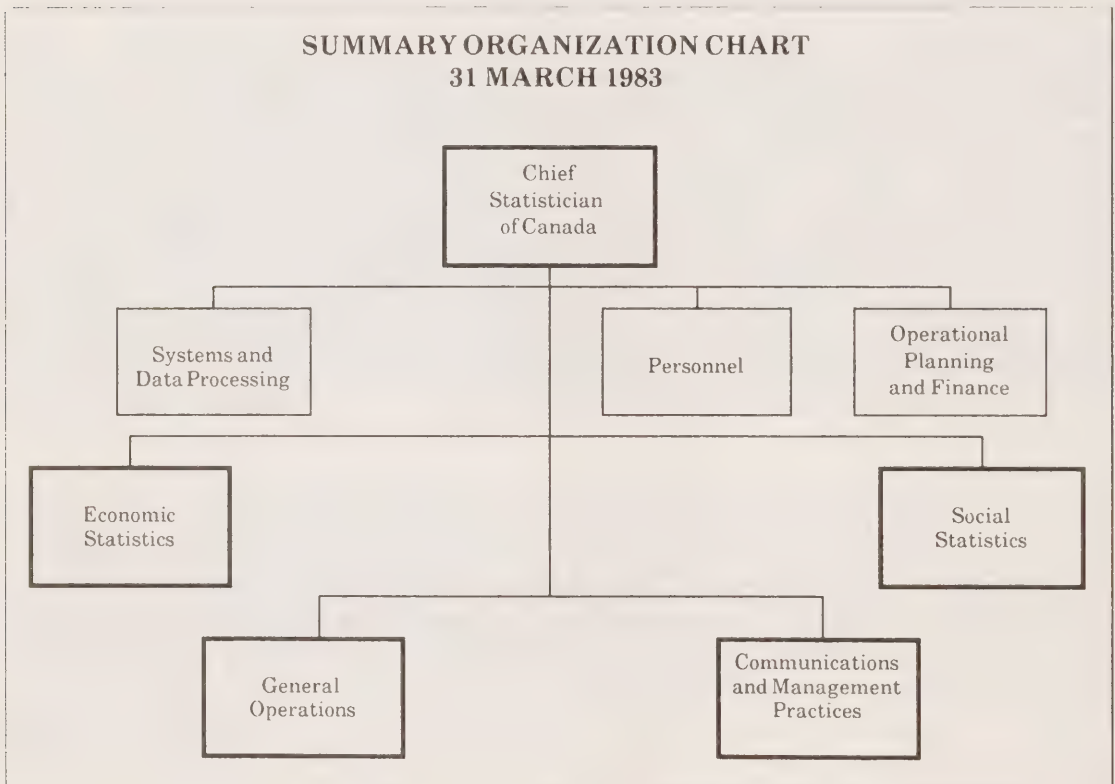
16.15 Many of the areas needing improvement have been known to the Agency for several years, as outside reports and internal studies clearly show. Present management has made progress in re-establishing a sense of stability and direction to the Agency after its setbacks in the late 1970s. However, real and lasting changes to underlying management processes are still needed. They pose a significant challenge and will require continued commitment from the management team.

Background

16.16 Statistics Canada, operating since 1918 under the authority of successive Acts, is a centralized statistical agency, and plays a dominant role in Canada's statistical system. Other entities – the provincial governments, other federal departments, and, to some extent, the private sector – also collect and disseminate some data, but their activities do not approach the scope of the work conducted by Statistics Canada. Through its national mandate, the Agency has both obligations and opportunities to co-ordinate and integrate the outputs of the statistical system as a whole and to provide professional leadership for the development of statistical standards and of substantive and methodological expertise.

16.17 Statistics Canada is made up of four fields – see Exhibit 16.1. The Economic Statistics Field and the Social Statistics Field are the two program areas.

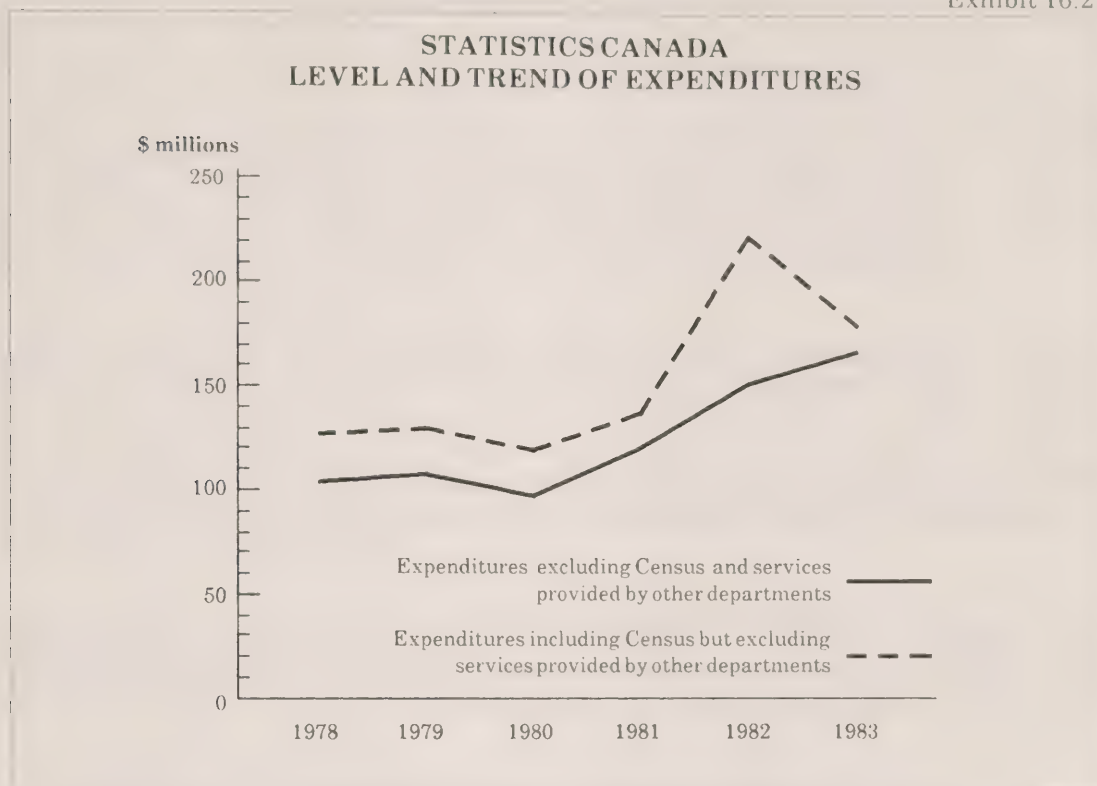
Exhibit 16.1



16.18 The mandate of Statistics Canada is very broad, requiring a coverage of all relevant aspects of the structure and functioning of Canadian society. It has a responsibility to collect and disseminate information that affects the social and economic lives of practically all Canadians. It must do so in an unbiased manner, whether the information reflects well or badly on the government of the day.

16.19 The Agency faces a practically unlimited demand for more and better statistics. However, its resources are limited and have been growing only modestly in recent years – see Exhibit 16.2. The demand to produce more data, while maintaining the quality of existing data and not placing excessive burdens on businesses and individuals, poses a continuing challenge.

Exhibit 16.2



16.20 When we began the audit, the Agency was just coming out of a troubled period. There had been four different Chief Statisticians in the previous 10 years, and the Agency had come under attack in both the press and the House of Commons for the quality of its products and its management practices. In 1979, the President of the Treasury Board, who was also the Minister responsible for Statistics Canada at that time, commissioned two studies to look into the affairs of the Agency. A national consulting firm was asked to study the Agency's management practices, and a team, headed by Sir Claus Moser, a former head of the government statistical service of the United Kingdom, was asked to examine the Agency's methodology. Both these studies reported their findings in 1980. In addition, the Comptroller General had undertaken an examination of the management practices of the Agency as part of the government-wide initiative for improved management practices and controls (IMPAC) project. We carefully considered the findings of these studies during our audit.

Audit Scope

16.21 We directed our audit work toward five key issues which we considered to be "survival" issues, since each one of them is essential to the functioning and effectiveness of Statistics Canada.

- **Credibility:** the Agency's objectivity and accuracy of its products.
- **Meeting User Needs:** the relevance of its products and the way in which they are disseminated.
- **Co-operation of Respondents:** control over demands for information directed to businesses and individuals.
- **Confidentiality:** control over the confidential responses received by the Agency.
- **Management Control:** practices affecting economy, efficiency, and measurement of program effectiveness.

16.22 In conducting our work, we developed criteria and reviewed controls on an Agency-wide basis. We also selected specific programs for in-depth review and testing.

16.23 We did not assess the quality of the Agency's statistical methodology. This was done by the Moser team in its 1980 study, and we took the results of that study into consideration. Our own examination was more concerned with controls exercised by management over the quality of statistical programs.

Observations and Recommendations

Credibility

16.24 It is essential that users have confidence in the statistics published by the Agency. The credibility of Statistics Canada rests to a large degree on two factors: its objectivity and the reliability of its statistics.

16.25 **Objectivity.** We found the Agency to be impartial and objective with respect to the statistics it publishes regularly. It uses methodology based on accepted scientific concepts that is free from bias in the sense of arbitrarily favouring any particular group or ideology. We noted a strong sense of independence and professionalism in the staff we interviewed. Furthermore, the release dates for most widely-used statistics are published well in advance and adhered to. This avoids the appearance of bias in the timing with which data are released.

16.26 We found one development which will require adequate monitoring to protect the Agency's reputation for objectivity. Statistics Canada is placing renewed emphasis on analytic studies. Such studies are conducted in order to contribute to understanding economic and social conditions. In addition, through trying to analyse and draw conclusions from the data, the statistician becomes aware of where the data are insufficient and need to be expanded or modified. This provides opportunities for assuring the continued relevance of its statistical information base. Furthermore, statisticians who are directly involved in collecting the data have an intimate knowledge of their strengths and weaknesses.

16.27 The well-known risk in doing analysis, however, is that the conclusions reached are open to the criticism of being biased to a particular point of view. Some of the Agency's studies have, on occasion, been criticized for this. Criticism and debate can be healthy. However, the credibility of the Agency depends on its being viewed as impartial and unbiased.

16.28 The risk of bias in analytical work can be minimized through the exercise of proper professional judgement by senior managers and a process of peer review. Whereas the Agency does monitor the quality of its analytical work through informal peer review, its current procedures need strengthening. At present, there are no formal Agency guidelines on what constitutes appropriate peer review for analytical work. Such guidelines would address the need to co-ordinate the review independently of the author, select objective critics and document the process.

16.29 To protect its reputation for impartiality, the Agency should strengthen its requirements for review of analytical studies prior to release. Compliance with these requirements should be monitored.

Agency's comments: Statistics Canada has received very little criticism concerning the objectivity of its analytic studies. The Agency's basic position is that an undue emphasis on the risk of criticism would constrain the healthy and necessary evolution of its ability and mandate to serve the public interest through analysis of the data it collects. Thus, the Agency will continue to place appropriate emphasis on analytical work, and will seek to minimize the risks, as it has done in the past, through appropriate choice of topics for analysis, explicit separation of assumptions and interpretations from facts, and the use of scientifically appropriate techniques. The means of ensuring that these requirements are satisfied are peer review and professionally competent supervision. These have long been in place within the Agency in one form or another, but will be more explicitly articulated through the establishment of more formalized criteria and processes for the review of analytical studies.

16.30 **Reliability.** Complete reliability in statistics does not exist and is an unrealistic goal. A more practical goal is to try to make statistics sufficiently reliable for the major uses made of them. Statistics Canada faces a considerable challenge in attempting to

do this within a fixed budget, in a reasonably timely fashion and without undue demands on its respondents.

16.31 The Agency has several activities that contribute to the reliability of its products. As an example, methodological research in the methodology branches of the two statistical fields has produced sophisticated sampling designs and techniques. There is ongoing research into alternative means of data collection. The Agency has developed a training program to turn new university graduates into skilled methodologists over a period of years. Program directors put significant effort into editing and imputation systems that are designed to check the integrity of data. The methodology used by directors is being documented; this allows it to be consistently applied.

16.32 The Moser team, in its 1980 study of the Agency's methodology, said, "As regards data quality we are impressed by much of what we have seen... . As regards timeliness, accuracy, and overall adequacy, most key series we have considered stand high in the international ranking". It referred in particular to the Labour Force Survey, the Systems of National Accounts and the Consumer Price Index.

16.33 Our contact with several knowledgeable users indicated that in general they were satisfied with the reliability of the statistics which the Agency is publishing. We were concerned, however, that even sophisticated users may not always be aware of the limitations of the data as described in more detail later in the chapter.

16.34 Despite its earlier comments, the Moser team remarked that it was concerned about the running down of the Agency's "methodological stock" and specifically referred to matters affecting data quality, such as the deterioration of benchmarks and sample frames from which the survey samples are drawn. The Agency has initiated certain corrective actions to strengthen its methodology function. However, improvements continue to be needed in the following areas.

16.35 **Methodology.** The Agency provides support to program managers through a pool of methodologists in each of the Economic and Social Statistics Fields. These methodologists are highly skilled and in some cases recognized internationally. However, trained methodologists are in short supply relative to the demand for their services so that there are programs which, according to their directors, have not received the methodological attention requested.

16.36 We found that there were no Agency standards or guidelines to provide direction to staff on acceptable practice in the design of methodology. Such guidelines would cover, for example, sampling design, the use of standard concepts, and requirements for designing and testing questionnaires. In 1980 the Agency produced a draft document entitled *Survey Design Standards and Guidelines*. Among other things, the standards sought to

- "- establish practices for survey design activity in Statistics Canada and help ensure that all significant factors affecting the quality of data and their intended use are considered at the design stage; and
- "- provide a set of standards to be observed and guidelines to be considered by all new and existing survey activity within Statistics Canada."

16.37 The term "survey" was defined as generally representing any data collection activity, including sample surveys, censuses and the use of administrative records for statistical purposes.

16.38 The 1980 Standards and Guidelines draft was not completed or released. We were informed that the matter is under renewed consideration by the Agency's Methodology and Standards Committee.

16.39 The Agency should develop methodology guidelines covering all aspects of statistical design to provide a framework for the design of sound methodology by its staff.

Agency's comments: In previous work on the development of methodology guidelines Statistics Canada found that, because of the great diversity of particular statistical programs, guidelines would have to be very general in nature. Their real usefulness, therefore, appeared to be questionable. The audit report does not suggest that the Agency's statistical work has suffered from the absence of a formal set of guidelines. The Agency ensures sound methodology through such means as building up in this area a staff of international calibre, developing a training program for new university graduates, documenting existing methodology, establishing methodology branches and conducting methodological research in each of the two subject-matter fields, and creating a variety of concrete mechanisms for the co-ordination and stimulation of methodology research and development work. Nevertheless, as part of the Agency's ongoing efforts to ensure that it is making the best possible use of "state-of-the-art" methodology, the practicality of the recommendation will continue to be kept under consideration.

16.40 **Measurement and disclosure of quality.** A recent Agency Strategic Overview stated that "an essential responsibility in statistical information development is to make every reasonable scientific effort to assess and articulate the degree of uncertainty associated with the information". It is essential that the user be provided with sufficient information to determine the appropriateness of the data for a specific use. Reliability itself is a multi-dimensional concept that is difficult to quantify. Although we recognize that quality measurements are costly and time-consuming, they are vital to the Agency's credibility and the usefulness of its products.

16.41 In 1977, the Agency issued a policy requiring that the quality of statistics be measured and disclosed. This policy has not been uniformly implemented or monitored. Although some publications, such as *The Labour Force*, include extensive information on survey methodology and the reliability of published results, in other instances the Agency is either not adequately measuring or not disclosing the quality of its statistics where it would be reasonable to do so.

16.42 For example, with respect to external trade statistics, the Agency provides some information on the source of its data but provides no information to users on the quality of the published statistics. While the Agency believes that its estimate of the total level of imports, for example, is reliable, it has known for some time that the classification of imports by commodity in its publications may contain significant errors because of deficiencies in the administrative records used to compile the data. Inadequate warning is provided to users on the quality of the data at the commodity level. The data are used extensively by the Department of Finance, the Anti-Dumping Tribunal, the Department of Industry, Trade and Commerce, and the Department of External Affairs in setting tariffs and in international negotiations.

16.43 The Agency should develop and disclose measures of quality for its statistics in accordance with its 1977 policy. Adherence to the policy should be monitored.

Agency's comments: The Agency is strongly committed to the intent of the 1977 policy and will continue its efforts to extend the policy's area of application beyond those major areas of the Agency's output which now satisfy its requirements. As worded, however, the recommendation could not be fully implemented, since "measures of quality" for many statistics – particularly those of a composite nature – are impossible to produce. The 1977 policy explicitly recognized this, and called for a full description of available information related to possible quality limitations, including, of course, quality measures when they are available.

16.44 One of the important factors affecting the cost of statistics is their required level of reliability. In response to a question by the Standing Committee on Miscellaneous Estimates, the Agency stated that "... in order to minimize both costs and the burden on individual respondents, the smallest sample size which will provide the required level of reliability is derived." We were not able to determine that in planning for or managing data series, management was setting explicit goals, where possible, for the required level of reliability of data which could be related to their main uses. For example, in the products we examined, we could find no explicit targets for acceptable response rates to questionnaires sent out, or acceptable precision in statistics relative to specific uses being made of them. This is unsatisfactory. Statistics could be produced which are not sufficiently precise and would therefore affect the Agency's credibility. Alternatively, statistics could be produced which are more precise than required and thus cost more than necessary.

16.45 The Agency should establish reasonable goals for the reliability of its statistics in relation to the major uses being made of them and the costs of gathering them. Achievement of the goals should be monitored and reported to senior management.

Agency's comments: The Agency recognizes and concurs with the underlying intent of the recommendation, but considers that this objective is best met by less mechanistic approaches.

The substantive difficulties are two-fold. First, any particular statistical series or compilation is typically used in many different contexts by many different users, and hence with different minimum expectations of reliability. The Agency does not, and cannot, know the full extent and complexity of these uses and, in any case, has no objective basis for assessing the relative importance of the various uses. A second, technical, problem derives from the numerous factors affecting the reliability of a particular statistical series, the inability to measure many of them, and hence, the impossibility of generating any single, overall measure of the reliability of the series.

The Agency assesses the reliability of its output in relation to user needs and costs through market feedback based on regular consultations with its major users, including systematic program evaluations. In addition, the Agency on an ongoing basis monitors its own product quality and operating costs, using a variety of measures appropriate to the circumstances (response rates, estimates of variance, edit failure rates, etc.) and feeds the results of these assessments into the ongoing production process. Instances of statistics being "over-engineered" from the quality standpoint, and hence unnecessarily consuming resources, are indeed rare (no current examples were identified during the audit review), and the Agency in the past has discontinued any statistical programs whose benefits ceased to outweigh their costs.

16.46 **Quality assurance.** As stated earlier, individual program managers are making extensive efforts to ensure the quality of the data they are publishing. However, at present, the Agency does not have a quality assurance function, independent of the line manager, designed to periodically assess and report on the adequacy of methodology and other measures taken by program directors to ensure that the quality of statistics is maintained. The current environment of limited budgets, autonomy given to program directors, absence of methodology guidelines and shortage of trained methodologists makes the need for a quality assurance function all the more essential. Management has recently recognized this need. Its management plan calls for development of a quality assurance process by the first quarter of 1984.

16.47 Management should ensure that its planned quality assurance process is accompanied by an independent monitoring function which can inform senior management of its findings.

Agency's comments: The Agency agrees with this recommendation. The formal establishment of a quality assurance process, scheduled to take place in 1984 in

the context of the Agency's management plan, is planned to be organized so as to ensure its independence from production activities and the related accountability structure.

16.48 With respect to quality assurance, one of the key advantages in operating a central statistical agency such as Statistics Canada is the ability to integrate and compare statistics from a wide range of programs. By doing this, the Agency can become aware of inconsistencies in the results of various programs and take corrective action if necessary. The System of National Accounts is one of the prime tools for integration used by Statistics Canada. In preparing the National Accounts, the Agency draws together results from its economic surveys. Based on this information, underestimates have been identified by the Agency in the results from two of its major surveys; namely, retail trade and labour income.

16.49 The survey of retail trade provides an estimate of the value of retail trade through a survey of retail establishments. However, by comparing the results from this survey with other economic indicators, the division which prepares the National Accounts has concluded that the survey of retail trade is underestimating the value of retail trade. To compensate for this, the Agency has been making upward adjustments to the results from the retail trade survey before making use of them in preparing the National Accounts. The initial upward adjustment for 1971 was 2.2 per cent but, since 1975, the annual adjustment has been over 12 per cent. For 1982, the adjustment was 13.5 per cent or \$13 billion.

16.50 The division which conducts the retail trade survey has known for at least seven years that its monthly survey is underestimating retail trade, but it questions the magnitude of the understatement involved. The opinion of this division is that the underestimate is much lower than 13 per cent. This difference of opinion has not been resolved. Furthermore, the Agency does not disclose the existence of an underestimate to readers of its retail trade publication.

16.51 One contributing problem is that the Agency has not conducted a census of retailers since 1971. A census, or full count of retailers, would provide a benchmark against which to measure the accuracy of survey results in subsequent periods. The Agency was refused funding for a new census of retailers in both 1976 and 1981. After several years of going without an adequate benchmark, the Agency is now assessing alternative measures to improve the quality of its retail trade survey. These measures involve greater use of income tax records. It is too early to tell if the new measures will correct the understatement problem in the survey.

16.52 A second factor which may be contributing to the underestimation of retail trade is the incompleteness or inaccuracy of the lists of businesses, or "sample frame", from which the samples for the retail trade survey are drawn. If the business list is inaccurate or incomplete, this affects the reliability of surveys based on it. The retail trade survey uses the Agency's Business Register as its sample frame. The Agency recognizes that the Business Register, which is based on taxation records, is incomplete because by design it excludes businesses without employees and is subject to delays in updating. As a result,

several divisions have supplemented their survey lists derived from the Business Register with information from other sources.

16.53 The accuracy of the Business Register has not been evaluated, although the Agency plans to do so. The accuracy of the separate divisional lists is unknown. Statistics Canada spends \$3 million a year on the Business Register. The cost of the separate divisional lists is unknown. Given the importance of accurate sampling frames to the quality of all business surveys conducted by the Agency, an assessment and rationalization of the Business Register and associated divisional lists are essential.

16.54 With respect to labour income, the employer-based survey of employment used until early 1983 resulted in initial estimates of labour income that were \$2 billion or 1 per cent lower on an annual basis than that used in calculating GNP. While this difference is not large in percentage terms, it is significant in terms of the sensitivity of labour income to many economic forecasters, including the Department of Finance. The Agency has known for several years that the results from its employer-based survey may be understated. There were user complaints as early as 1974. In 1976, the Agency undertook to solve the problem by designing a new survey which was to be operational in 1981 but is only now being introduced. It is too early to assess whether the new survey will be successful.

16.55 The Agency should resolve the existing discrepancies between the National Accounts and its two major underlying surveys. Problems identified through the integrative mechanism of the system of National Accounts should be resolved in a timely manner.

Agency's comments: As noted in the report, the Agency has already implemented major programs to address the problem of underestimation in the retail trade and labour income survey data.

With respect to the retail trade estimates, it has long been evident that corrective action depended largely upon the availability of an appropriate benchmark - which indeed is one of the recommendations of the present report. However, the Agency's attempts to gain resources for a comprehensive Census of Merchandising and Services, which would have provided such a benchmark, were unsuccessful in both 1976 and 1981. Consequently, the Agency has undertaken for the 1982 reference year a stop-gap measure consisting of a survey of the retail trade sectors covering all large retailers, supplemented by tax information for the smaller retailers. This approach, albeit less effective than a comprehensive census, will provide timely benchmark levels, as well as more up-to-date business/personal expenditure ratios to assist in the appropriate allocation of expenditures to the consumer sector of the National Accounts.

With respect to current labour income estimates, corrective steps have already been initiated through a redesigned monthly establishment-based survey of Employment, Payrolls and Hours, from which the income estimates derive. A completely new survey is now fully operational but as the report indicates, it is too early to assess its results.

The Agency has no difficulty in endorsing the second part of the recommendation. To the extent that problems identified through the integrative mechanism of the National Accounts are not "resolved in a timely manner", it is not an indication of tardiness on the part of the responsible managers, but rather of the major dimensions of the problems, and of the difficulties of resolving them within a short timespan.

16.56 **Appropriate steps should be taken by the Agency to ensure that it is able to maintain sound and economical sampling frames for economic statistics.**

Agency's comments: *The Agency is taking appropriate steps to maintain sound and economical sampling frames for economic statistics, and will continue to pursue these vigorously. Experience in Canada and elsewhere has demonstrated that Business Registers based on major administrative systems (such as the annual Revenue Canada lists of employers) provide the soundest and most economical approach to the development of sampling frames for economic statistics, and such an approach is used in Canada to provide the foundation of the central Business Register. This taxation-based source, while the best available, is subject to unavoidable problems: it does not cover on a current basis businesses having no employees, it is subject to changes resulting from new administrative arrangements, and is subject to a built-in lag in reporting business "births" and "deaths". A number of separate divisional registers, all of which are derivations of the central register, are purposely maintained for one of two reasons: to overcome, for a specific application, the known limitations of the central Business Register, or to benefit from the economies of processing smaller lists.*

16.57 **The Agency should take appropriate action to protect more fully the quality of its merchandising and services statistics by ensuring the availability of adequate benchmark data.**

Agency's comments: *The recommendation appropriately identifies merchandising and services statistics as a specially critical area of concern within the general requirement for periodically calibrating the current statistical program through more comprehensive benchmark estimates. As will be clear from the comment on an earlier recommendation, the Agency has repeatedly sought the funds required to conduct a Census of Merchandising and Services, but without success. Given the urgency of the problem, the Agency is taking alternative steps which require fewer resources but will provide less comprehensive information.*

Meeting User Needs

16.58 **To meet users' needs, the Agency's products must be relevant, timely and appropriately disseminated.**

16.59 Relevance. The Agency's mandate is very broad. Essentially, it is "to provide information needed to develop social and economic policies and programs and to understand Canadian society". An added dimension is that Statistics Canada is a national agency with responsibility for collaborating with departments and agencies in all levels of government to best meet the statistical needs of users. At any point, the mix of Statistics Canada's products and services reflects its interpretation of that mandate.

16.60 Our work showed that the Agency's product line was certainly relevant. The product line of over 500 statistical programs has evolved over a long period, and there is evidence that it has been adjusted at the margin in response to user requirements. Most of the Agency's budget goes to producing statistics required by law or well established government needs. Examples are the Census of Population, the Consumer Price Index, the System of National Accounts, and unemployment statistics. We found no instances where Statistics Canada was spending significant sums on products which did not have identifiable users.



Conducting the census of population in northern Canada.

16.61 The Agency's core users are extensively consulted. We noted a strong commitment on the part of the Chief Statistician to be responsive to government needs. The Agency's relatively recent access to Cabinet documents and its representation at meetings of three government envelopes – Economic and Regional Development, Social Development, and Services to Government – facilitate frequent senior level contact with other federal

government departments. This improves the Agency's ability to anticipate the information requirements of the federal government.

16.62 Our interviews with several key users, including those in federal and provincial governments, showed that they found the Agency's products on the whole both satisfactory and useful, though gaps in coverage both of subject matter and of detail do exist.

16.63 In an environment of infinite demand, gaps in coverage will always exist. On the other hand, almost any information produced is likely to have some application for some users. The key question is this: is the Agency using its resources in the most effective manner? The answer rests with how the Agency sets its priorities, how it evaluates options for service, and the extent to which it critically evaluates its product line. Steps which the Agency can take to improve the way it currently sets priorities are:

- *Collecting user feedback in an organized manner, evaluating the feedback, and ranking demands.* At present, this is done by program directors and senior line managers as part of their ongoing management responsibilities. While the assembled information is used in program planning and priority-setting within the two major Fields, there has, until recently, been little co-ordinated Agency-wide assessment of options. This could result in Fields pursuing incremental priorities in their own areas without adequate reference to the balance in the Agency's overall program.
- *Achieving overall balance in serving various users.* Careful attention must be given by senior management to ensuring an appropriate balance between serving government needs at all levels versus private sector needs. Broad priorities must also be established between different subject matters, for example, between investing in more business-related statistics versus more health-related statistics. Finally, management needs to communicate clear priorities in the area of improving the quality and usefulness of existing programs versus investing in new programs.

At present, there are few explicit guidelines in these areas, and decisions in many cases do not appear to be based on explicit objectives or a long-term plan.

- *Requiring directors to assess and report the balance in the extent of coverage, timeliness, accuracy, and frequency within specific programs.* These factors are the key elements in determining the costs and the usefulness of a statistical program. Generally, the more comprehensive and detailed the statistics, the more they cost and the longer they take to produce. Similarly, there is often a trade-off between accuracy and timeliness in statistics.

At present, there is no requirement for directors to assess their programs on an ongoing basis. We found that directors who were assessing their programs were doing so with varying degrees of thoroughness. The result is that there is no organized reporting to senior management to inform them of potential imbalances in programs.

- *Establishing a National Statistics Council.* To help in setting priorities, both the Moser and the national consulting firm's studies, referred to earlier, recommended that a National Statistical Council be established. Such a council, composed of high level external advisers representing a variety of interests and users, could advise the Chief Statistician on a wide range of matters including priority setting. A council of this type exists in Australia, and our review of its reports showed that such a council can be of great help to a Chief Statistician. We understand that the formation of a council has been considered by the Agency.

16.64 There is evidence that the Agency has recognized the need to improve its planning and priority setting process. It has appointed a Director of Corporate Planning and has instituted annual conferences of senior staff. Its management plans include projects designed to introduce guidelines for directors in monitoring the performance of their programs and in reporting program options in an organized fashion for senior management consideration. The plans also call for setting explicit long and short-term Agency goals and for monitoring adherence to these goals by line managers. At the time of our audit, these initiatives were not yet sufficiently advanced to enable us to evaluate them.

16.65 The Agency should continue its recent initiatives to improve the decision-making processes involved in setting goals and achieving balance within and among its individual programs.

Agency's comments: The Agency will indeed continue to follow the intent of this recommendation, through a variety of means. Nevertheless, it bears emphasizing that an explicit set of priority rankings is neither practicable nor productive because the complexity and non-commensurability of the Agency's programs make it impossible to establish operationally useful criteria. Furthermore, as noted by the audit report, an overwhelming proportion of the Agency's products are fixed by statutory requirements or respond to well-established and largely unchanging governmental and other public needs. The Agency's planning process, therefore, operates within a relatively narrow margin of discretion.

16.66 Statistics Canada should continue to explore the formation of a National Statistics Council and reach a decision about its feasibility in Canada.

Agency's comments: National Statistical Councils, in one form or another, exist in several countries; the report cited the Australian experience, for example. On the other hand, several statistically developed countries, among which are the United Kingdom and the United States do not have them. The issue has been considered carefully in Canada on a number of occasions during the past decade, but to date the potential advantages of such a body have not been considered sufficient to offset the difficulties associated with addressing competently the very great diversity of Statistics Canada's program activities under the umbrella of a single body of part-time external experts. The Agency has long had an extensive network of consultative arrangements with both government and industry which have been quite successful in doing much of the work that might

be expected of a formalized council. The Agency has elected for the time being to continue with these arrangements and extend them where appropriate on discrete and definable areas of statistics (e.g., price measurement).

16.67 Frequency and timeliness. Frequency refers to how often the statistics are produced (e.g., monthly or quarterly) and timeliness refers to how soon after the end of the period being measured they are released. Both these factors significantly affect costs.

16.68 We found no explicit evidence that the Agency is making an organized assessment of the frequency with which it delivers its products, although we were advised that this was given some attention during the past year's planning exercise. A review of the Agency's publications shows that more than 90 per cent are produced on an annual or more frequent basis. Opportunities may well exist to save costs through a systematic examination of the need for this level of frequency. For example, is it necessary to produce restaurant, caterer and tavern statistics monthly, or statistics on honey production semi-annually? Could savings be made in a cost-effective manner by publishing these and other statistics less frequently?

16.69 With respect to the timeliness with which statistics are released, we observed that time schedules are established and met and that users seem generally satisfied. The Agency has made efforts to make data available to users within a reasonable period of time, although in many cases the data would be more useful if they were available faster. Certain key statistics, such as the Consumer Price Index and the unemployment rate, are published very promptly. For example, unemployment rates based on a survey of 56,000 households each month are processed and released no later than the eleventh day of the following month. Others, such as the travel accommodation publication, are released as much as one year or more after their reference period. There is a danger that, in some cases, such late data may be irrelevant for many users.

16.70 On the other hand, pressure from users tends to be only one way – for more timely data. The danger exists that, without controls, certain programs will respond to this pressure out of proportion to the cost to the Agency. Shortening production periods in order to accelerate data release has implications for staffing requirements and efficiency levels. We found little evidence that senior management was systematically evaluating and challenging the timeliness of its products in relation to costs and the needs of various users.

16.71 The frequency and timeliness with which statistics are produced should be regularly reviewed by management and assessed in relation to user needs and costs.

Agency's comments: The formal process of review is being made more systematic through the mandate of the Program Evaluation function and through management review carried out in conjunction with planning done within the context of a new Operational Planning Framework. Program evaluations, as well as ongoing management review, have focused and will continue to focus on

frequency and timeliness, since these are two of the fundamental aspects of virtually all statistical programs.

16.72 Dissemination. One of Statistics Canada's key responsibilities is to inform Canadians of its findings. The Agency carries out its dissemination responsibility through a variety of means, such as printed publications; a computerized data bank called CANSIM; a telephone user advisory service; seminars and workshops for interested users; and press releases to the media.

16.73 Sophisticated users of the Agency's products seem well served. These include government departments and large private corporations. The Agency's program directors keep in close touch with these users and try to satisfy their needs.

16.74 However, the Agency also has a responsibility to make available its broad range of products – prepared at taxpayers' expense – to a wider audience of users in cost-effective modes. To carry out this responsibility effectively, the Agency needs an overall dissemination strategy. This is not in place at the present time. Such a strategy would include:

- objectives and priorities of a dissemination program;
- the relative roles and responsibilities for dissemination;
- the most effective means of meeting the information needs of various client groups;
- alternative modes of dissemination, such as the optimal mix of hardcopy and electronic products; and
- pricing of services in relation to costs and revenues.

16.75 Responsibilities for marketing are shared among directors of individual programs, the Agency's Communications and Management Practices Field and the Regional Operations offices which offer a user advisory service. These responsibilities could be more clearly defined. Decisions as to what to disseminate, to whom and in what format are the responsibility of individual program directors. Yet these directors are often subject-matter specialists who may not have the required skills to make decisions on effective dissemination. The role of the marketing staff in the Communications and Management Practices Field is not well defined.

16.76 Most directors choose to disseminate information through printed publications. These publications represent only a fraction of the information available and, although informative, are often difficult for users to work with. A study recently conducted by the Agency concluded that insufficient attention was being given by program directors to the

costs of their publications and alternatives to printed publications such as microfiche and computer tapes.

16.77 In the area of computerized dissemination, the Agency's CANSIM represents a significant achievement. CANSIM is a computerized data bank of statistical information which can be accessed on-line through a terminal on the user's premises. Recently, the Agency has developed a new public information service, called TELICHART, which enables Telidon terminals to access CANSIM data and display statistics in colour graphics.

16.78 Although CANSIM has been in operation for more than 10 years as the Agency's main computerized dissemination vehicle, it has not been evaluated for its effectiveness versus costs. To date, the placement of data on the CANSIM data bank has been slow to evolve, despite a 1974 Agency policy requiring directors to place as much data as possible on CANSIM. The present contents of the CANSIM data bank have not been evaluated to determine if they represent an optimal mix and quantity of data across a range of subjects.

16.79 The Agency should develop and maintain a comprehensive marketing strategy which addresses the objectives and priorities of a dissemination program, roles and responsibilities for dissemination, the most effective modes of dissemination, and pricing of services in relation to costs and revenues.

Agency's comments: The Agency agrees with the intent of this recommendation and has made substantial progress toward its full implementation.

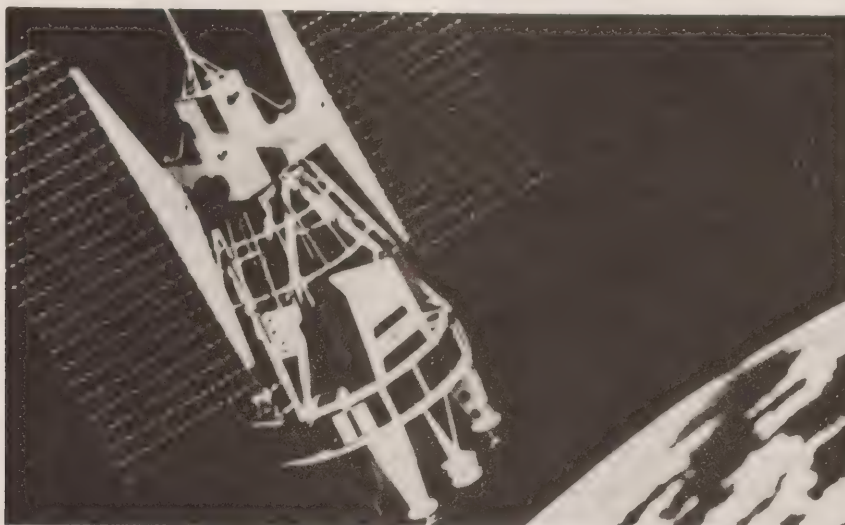
The report correctly observes that "sophisticated users of the Agency's products seem well served", and thus this recommendation is mainly addressed to the wider audience of less sophisticated users which the Agency also has an obligation to serve.

The Agency has been pursuing this objective for some time; for instance, the centralized marketing support staffs have been regrouped into market-oriented segments; much more active use is now being made of news releases; and the progressive dissemination of 1981 Census data is being more closely tied in to the needs of communities and interest groups.

Co-operation of Respondents

16.80 Over the past five years, the Agency has taken significant steps in reducing the response burden placed on individuals and businesses. Our interviews with representatives of key respondent groups, such as the Canadian Federation of Independent Business, the Canadian Manufacturers' Association and the Retail Council of Canada, showed that the business community was generally satisfied that Statistics Canada's demands for information were no longer excessive.

16.81 A major effort in reducing response burden came in 1978 when, in co-operation with the Office of Paper Burden, the Agency identified opportunities for substantial reductions. For example, the Agency estimates that, as part of the government paper burden reduction exercise, it reduced the number of questionnaires mailed by 14 per cent and the time required to fill in forms by 22 per cent. This was achieved through either eliminating surveys or reducing sample sizes.



Satellite used in data collection

16.82 In all subject matter areas we examined, program directors were aware of the need to minimize demands on respondents. We also found evidence that alternative means of obtaining data were being reviewed by directors. There is evidence of continuing progress in reducing response burden. For example:

- The Agency has established two research groups – Tax Record Access and Administrative Data Development – to explore the possibilities of using administrative data, such as tax returns, gathered by other organizations as an alternative to collecting similar data by surveys.
- Changes to the Corporations and Labour Unions Returns Act will result in tax records being substituted for surveys of small business. This will enable the Agency to drop 96,000 businesses from its list of respondents. This is expected to take effect this year.
- The Agriculture Division, among others, has consolidated and eliminated surveys and substituted data from other sources (e.g., Milk Marketing Board) for surveys. The Agriculture Division is also using satellites to determine

potato crop yields. This innovative data collection method is supplemented by visits to a relatively small number of farms to verify the satellite information. Research into expanding this method to other crops is under way.

16.83 Despite these efforts, the Agency constantly faces the need to collect more information as demands for more and better statistics continue to grow. Thus response burden is an issue which must be monitored regularly and controlled. We observed that, although program directors are aware of the number of questionnaires they send to respondents, they are not required to define response burden (such as the frequency of questionnaires, time taken to respond to them or the need for respondents to maintain separate information systems). Nor are they required to report the burden on a comparable basis among divisions.

16.84 The Agency should establish and monitor indicators of response burden in a manner which will allow senior management to periodically assess the impact of its data gathering activities.

Agency's comments: The Agency agrees with this recommendation. It has in the past prepared measures of response burden, the results of some of which are noted in the report. Such calculations will be repeated periodically.

As the report clearly indicates, the business community presently appears to be satisfied that Statistics Canada's requirements for information are no longer imposing an excessive burden. This is almost wholly the consequence of the Agency's own efforts during the late 1970s. Nevertheless, Statistics Canada regards the minimization of response burden as a continuing challenge, and will continue its efforts to reduce respondent burden, particularly through the further exploitation of administrative records as a substitute for the direct gathering of data.

Confidentiality

16.85 The Agency is taking satisfactory measures to protect the confidentiality of the responses it receives. Although no system is fail safe, there is a strong awareness at the Agency of the importance of maintaining privacy over individual data. Among the variety of procedures in place, we observed that all Agency staff are required to take an oath of secrecy not to divulge any information pertaining to individual responses received by the Agency. Also, the Agency takes reasonable precautions to prevent unauthorized physical access to its premises. Completed questionnaires are safeguarded in locked cabinets, and there is control over access to computer files. Furthermore, Statistics Canada maintains a strict practice of not publishing any data that might make it possible to identify a particular respondent, such as industrial data from a one-company town where the company could be easily recognized. In these cases, data are merged, rounded or not disclosed in order to protect the confidentiality of the respondent.

Management Control

16.86 Our findings in the area of management control are presented under the following headings:

- policy setting;
- planning and resource allocation;
- program evaluation;
- internal audit;
- accounting control;
- management of clerical resources;
- classification levels; and
- other.

16.87 Policy setting. Since 1977, there have been two unsuccessful attempts to establish a departmental policy manual. Currently, there is no organized set of Agency policies available. We reviewed a considerable amount of documentation in the Agency, including material referred to as active policy statements. This documentation is often undated, unsigned and inappropriately labelled. As a result, there is uncertainty as to the status, relevance and authority of this material for both managers and staff.

16.88 The Agency should establish and maintain a comprehensive manual of policies.

Agency's comments: The Agency agrees with this recommendation. During the past two and one-half years, senior management in the Agency has been addressing fundamental aspects of policy setting. In November 1982, after a 15-month period of pilot trials, a network of some 15 management committees was established, covering responsibilities for each of the Agency-wide functions such as Personnel, Planning and Finance, Operations, Systems and Information Processing, etc., and including a Policy Committee chaired by the Chief Statistician. Each committee is authorized to establish policies and practices in its area of concern, and is required to disseminate its policy decisions. With this process in active operation, it is now practical and useful to start consolidating these decisions into a comprehensive manual.

16.89 Planning and resource allocation. Planning in a statistical agency is an intrinsically complex operation involving judgements about relative priorities in many different areas. Nonetheless, there are deficiencies in the Agency's planning and resource allocation mechanisms. Management has prepared plans to address the existing deficiencies in:

- communication of the planning process;
- integration and consistency between strategic overviews and long and short-term plans;
- integration of separate planning processes for areas such as human resources, EDP and marketing;
- accountability for use of resources (budget variances in dollars are reported but not analysed as to how they have affected the Agency's goals);
- use of the Management Information System; and
- adequacy of monitoring the performance of programs as well as the criteria and procedures to guide such measurements.

16.90 These deficiencies are significant and have existed for some time. The Agency's management plan indicates a 1984 target date for completing the implementation of corrective actions. During the past year, a Director of Planning has been appointed as well as a director in charge of the management plan for improvements. Some outputs are already available such as guidelines for strategic, long-term and short-term planning. However, these initiatives are still too recent to be evaluated.

16.91 Program evaluation. The Program Evaluation Division was officially established in 1973, but was used until 1980 for a variety of tasks not related to program evaluation.

16.92 Program evaluation activity, as it is currently understood in the government, began in the Agency in 1980 with a planned cycle of five pilot evaluations. A policy on evaluation was developed in 1981 and a Director of Program Evaluation was appointed in 1982. With the appointment of a Director, significant attention has been given to setting up the Division and to putting in place the necessary procedures and plans to carry out corporate program evaluations. The development work in this area is now largely complete.

16.93 As of March 1983, the Division had completed four of five planned pilot evaluations. The pilot evaluations were purposely limited in scope in order to gain experience and establish credibility. Such a strategy was a reasonable and appropriate way to proceed. The pilot evaluations conducted to date have not uniformly covered a full range of potential issues, such as consideration of methodology, appropriateness of dissemination procedures, and the extent to which user needs were met in the program. However, the experience gained through the pilot studies has now given the unit the capability of conducting more comprehensive evaluations if they are directed to do so by senior management. The Agency has indicated that future evaluations will cover a comprehensive range of evaluation issues.

16.94 In its evaluation policy, the Agency has indicated that it intends to evaluate all its programs within a five-year cycle. In light of this, and management's high expectations with respect to the quality and scope of evaluations, the level of resources currently available to the Division will need to be closely monitored if these objectives are to be met.

16.95 Management should closely monitor the level of resources assigned to the program evaluation function in light of the expectations placed on it.

Agency's comments: The Agency agrees with this recommendation. Great importance is attached to the effectiveness of the program evaluation function, the work of which is under the continual scrutiny of the Program Evaluation Committee, chaired by the Chief Statistician. The resources presently allocated to the program evaluation function are based on experience obtained in five pilot studies and on the comprehensive plan which has been developed during the past year. However, should it be necessary, the resources will be adjusted in the light of further experiences.

16.96 **Internal audit.** We reported major deficiencies in the internal audit function in 1976 and in 1978 to the Chief Statistician. There has been no material improvement in the situation since then. Management has recently appointed a new Director of Internal Audit and has a project in its management plan to build a stronger internal auditing function.

16.97 **Accounting control.** We found that overall accounting control at the Agency was satisfactory.

16.98 **Management of clerical resources.** The nature of statistical programs is such that there are peaks and valleys in the processing cycle. When questionnaires are returned on a monthly survey, for example, there is a peak workload during which the questionnaires have to be processed and the monthly statistics prepared. During the remainder of the month, activity diminishes substantially. Another important factor affecting the peaking of workloads is the demand placed on the Agency for timely statistics.

16.99 In view of the characteristics of much of the clerical work at the Agency – its repetitive nature as well as the potential problem of having staff alternately very busy or idle – we examined the Agency's management of the efficiency of its clerical staff.

16.100 We found that clerical staff in the two major program fields were generally organized to serve individual statistical programs instead of being pooled to serve more than one program. We also found that program directors, concerned with meeting deadlines, appeared to be staffing their programs to meet peak level production without assessing the costs of having staff idle during low volume periods. In addition, program managers were not systematically monitoring the efficiency of their clerical staff. In the absence of

management information on the efficiency of clerical staff, we conducted our own audit tests in this area.

16.101 Our tests covered approximately 130 clerical employees in two divisions of the Agency. One division was recommended to us by the Agency as representing a division with a high concentration of clerical staff processing a high volume of work. The other division was chosen by us because it was in another field and also had a reasonably high concentration of clerical staff. The objective of our test was to ascertain if significant opportunities existed to improve clerical efficiency.

16.102 We examined the nature of the work performed by the clerks and ascertained that it was of a routine nature such as sorting documents, coding, and keying in data. We prepared engineered work standards for the tasks performed using a widely accepted work measurement technique which allows for fatigue, coffee breaks and other customary non-productive time. Finally, we examined time records and production volumes over the full year January 1982 to December 1982. Our tests were designed to measure the average efficiency of clerks producing output which met quality levels acceptable to management.

16.103 Our observations showed the effect of the peak and valley conditions we mentioned earlier. When work was available toward the end of the week, month or other cycle, we observed that clerks achieved acceptable efficiency levels. At low points in the cycle, however, clerks were typically operating at much lower levels of efficiency.

16.104 On the average, throughout the year, we found that the clerks we tested were operating at only 56 per cent efficiency. This represents a considerable underutilization of clerical staff in the units we tested. We did not measure all the clerks in the Agency. In our 1978 annual Report, we cited 80 per cent as being a minimum acceptable level of clerical performance for comparable job types and working environments.

16.105 There is evidence that the Agency has recognized the need to improve clerical efficiency and has begun to explore the possibility of integrating its clerical operations to save costs. A Director General in charge of Operations Integration and Regionalization, supported by an Operations Committee, has recently been appointed for this purpose.

16.106 When conducting our measurement of efficiency, we accepted the existing methods of processing work as a given, and did not attempt to define a more efficient set of procedures. We did observe, however, that there were inefficiencies in certain cases in the way in which the workflow was designed. For example, we noted in one unit that work stations were laid out so that documents had to be transported between floors several times before processing could be completed. We also noted that clerks in some units experienced idle time in the mornings while waiting for work to arrive. These situations could be improved by better workflow design; for example, by changing the routing or storage of documents to avoid unnecessary transportation, and by creating a small daily overflow of work so that clerks can be kept continuously occupied instead of waiting for work to arrive each morning.

16.107 At present, individual directors are responsible for designing their own workflows and clerical procedures without the benefit of advice from specialists in workflow design. Many government departments involved in large scale clerical processing, similar to that of Statistics Canada, have found it useful to employ specialists in workflow design and clerical efficiency to improve the productivity of their staff.

16.108 The Agency should examine its workflow and procedures using appropriate expertise to improve the productivity of its clerical operations.

Agency's comments: Increasingly in the future, the newly established Operations Integration and Regionalization Branch will be playing an important role in encouraging, facilitating, and co-ordinating undertakings designed to increase overall productivity, including clerical operations. Nevertheless, it remains a basic responsibility of divisional management to keep its workflow and operational procedures under review in order to identify opportunities for improving productivity. Significant improvements in the quality, quantity and timeliness of outputs relative to resource inputs have been achieved in the recent past, and emerging technological developments in electronic data processing and office automation will continue to provide fresh opportunities for further improvements. In the planning and implementation of such improvements, divisional management will supplement its own specialist skills with those from the various centralized functional support services within the Agency, and from outside sources when necessary.

16.109 Opportunities to improve the present level of clerical efficiency should be actively pursued. The practice of staffing for peak production levels should be examined and, where appropriate, more cost-effective ways of meeting production demands should be explored.

Agency's comments: The Operations Integration and Regionalization Branch will lead and co-ordinate the Agency's efforts to improve its operational efficiency by means which encompass, but go far beyond, attempts to obtain increased productivity from clerical staff.

The reported level of clerical efficiency in the portions of the two Divisions examined, at 56 per cent, was roughly comparable to the average level of 60.8 per cent found in tests conducted in 10 departments in 1979 by the Auditor General. However, the tests of clerical efficiency conducted during the audit were limited in scope, in that they deliberately did not attempt to deal with overall operational efficiency, and were not intended to be a representative sample of all of the Agency's clerical operations. The Agency therefore does not believe that the test results form an appropriate basis for an overall assessment of the efficiency of its clerical staff. The Agency also does not believe that the "practice of staffing for peak levels of production" is as widespread or inefficient as the report implies, nor does it believe that unwarranted trade-offs between timeliness and costs are being made by program managers.

16.110 The Agency should establish clerical performance measurement policies and, where appropriate, implement performance measurement systems.

Agency's comments: The Agency fully supports the intent of the recommendation, although it does not agree with the observations on which the recommendation is based. The recommendation regarding performance measurement systems is being addressed through the Agency's Management Practices Action Plan.

16.111 **Classification levels.** Classification levels have a major impact on salaries. In 1980, the Agency commissioned the Audit Services Bureau of Supply and Services Canada to conduct an audit of its classification activity. The audit, subsequently accepted by Treasury Board, found that 44 per cent of the 100 positions selected for audit in the National Capital Region were misclassified (38 per cent over-classified and 6 per cent under-classified) and that 47 per cent of the official job descriptions were not consistent with the duties being performed. The audit report also indicated significant weaknesses in the Agency's monitoring and control of its classification system. The Agency has not yet put in place mechanisms that would prevent these problems from occurring.

16.112 Of the specific positions which were identified as misclassified in the audit sample, most have been acted upon. However, the few that have not been resolved involve over-classifications of clerical statistical positions. Any change to the classification levels of these positions would have an impact on what the Agency estimates to be 1,200 similar positions throughout the organization. With the agreement of the Treasury Board Secretariat, corrective action on these positions had been deferred, subject to a departmental study into the classification standard which was to have been completed by July 1982. The project is not yet complete, and therefore the classification status of a large number of clerical positions throughout the Agency remains unresolved.

16.113 The Agency should complete the corrective action on potential over-classifications identified by the 1980 audit since the positions not yet corrected affect a large number of similar positions throughout the Agency.

Agency's comments: As noted in the report, the Agency has already acted upon most of the positions identified as misclassified in the 1980 audit. The situation arising from the potential misclassification of some of the Agency's clerical positions will be dealt with as soon as the Agency and the Treasury Board Secretariat have agreed upon an appropriate course of action.

16.114 The Agency should establish the control systems necessary to ensure adequate management of the classification system.

Agency's comments: The Agency has developed and is in the process of implementing appropriate procedures to monitor the classification system.

16.115 Other. In the area of management control, our observations underscore the need to strengthen corporate cohesiveness. There is a tendency for individual directors to operate independently without recognizing the need for trade-offs and co-ordination of effort. All the recent independent studies of the Agency, and senior managers themselves, have tended to confirm this.

16.116 In our opinion, the present autonomy given to individual directors should be supported by sufficient central direction to ensure that directors are working toward common goals. In this manner, the Agency can initiate corrective action across program and organizational lines. Without the ability to do this, the Agency's management might well continue to be unable to correct many long-standing deficiencies. For example, the process for setting priorities, planning, allocating resources and holding managers accountable all need significant improvement.

16.117 There is evidence that present management is committed to making improvements. A number of management initiatives in key areas have been referred to throughout this report. As indicated earlier, a comprehensive management plan has been prepared which seeks to make significant improvements to Agency practices in corporate planning; quality assurance; communications; human resources management; internal audit; program evaluation; and performance measurement. The individual projects referred to in our observations have target completion dates ranging from the third quarter of 1983 to the fourth quarter of 1984 with the full plan being scheduled for completion by December 1984. Because of difficulties in staffing, the plan has taken over two years to develop. It was formally approved for implementation in January 1983. Initial results from implementation of corrective action are promising. However, the target date of December 1984 for completion of the plan is ambitious.

ADDITIONAL AUDIT OBSERVATIONS

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Table of Contents

	Paragraph	Page
Introduction	17.1	521
Observations on Crown Corporations		
Improper Use of Appropriations	17.2	521
Cape Breton Development Corporation - Use of capital appropriation for purpose other than that authorized by Parliament	17.6	521
Department of Transport - Drawdown of funds in advance of need for Ridley Island Project	17.9	522
Via Rail Canada Inc. - Payments in advance of proven need	17.12	523
Audit Reports - Crown Corporations	17.18	524
Canadian Dairy Commission - Levies instituted beyond the powers of the Commission	17.20	524
Canadian Saltfish Corporation - Activities beyond its statutory powers	17.24	525
Loto Canada Inc. - Payments beyond the powers of the Corporation, and other concerns	17.27	525
Canada Mortgage and Housing Corporation - Questionable legality of Canadian home ownership stimulation payments	17.34	526
Observations on Departmental Expenditures		
Department of Agriculture - Shortfall in the Western Grain Stabilization Account	17.38	527
Exchange Fund Account - Valuation of gold and accounting for the realized gains on sales of gold	17.42	528
Department of Fisheries and Oceans - Lack of authorization for expenditures for vessel charters	17.45	528

	Paragraph	Page
ITC/DREE -		
Failure to collect debt owed to the Crown	17.46	528
ITC/DREE -		
Negligence in the payment of a loan guarantee	17.49	529
Department of Public Works -		
Failure to ensure fairness and economy in the spending of public funds in negotiating a lease agreement	17.54	530
Department of Public Works -		
Buildings acquired and either not utilized or under-utilized	17.57	532
Department of Public Works and Harbourfront Corporation		
Failure to provide essential information and obtain appropriate authority	17.61	532
Department of Public Works -		
Contravention of the Government Contracts Regulations	17.66	533
Department of Public Works -		
Cost of \$697,000 attributable to deficient wording in a lease drawn up by the Department	17.70	533
Department of Transport -		
Up-front payments of \$72 million made to a CN Marine contractor without adequate security	17.74	534
Department of Transport -		
Payments of \$282 million made to railways without enabling legislation	17.78	535
Department of Transport -		
\$46.8 million double payment made to CN not recovered	17.83	536
Department of National Revenue (Taxation) -		
Incorrect assessments of 1982 income tax returns	17.88	537
Use of appropriations granted by Parliament	17.92	538
1983 IMPAC Progress Review	17.95	538
Report Under Section 11 of the Auditor General Act on Our Continuing Review of the Oil Import Compensation Program	17.116	546
Exhibits		
17.1 Overexpended Appropriations		539
17.2 IMPAC - Status of Action Plans		542
17.3 - Progress in Implementing Action Plans as Reported by Departments		545
17.4 - Progress in Key IMPAC Areas		546

ADDITIONAL AUDIT OBSERVATIONS

Introduction

17.1 Under Section 7 of the Auditor General Act, the Auditor General is required to report annually on specific types of transactions observed during audits and to call attention to anything he considers to be of significance and of a nature that should be brought to the attention of the House of Commons. In addition, under Section 11 of the Act he is required to report on any assignment undertaken for the Governor in Council on the financial affairs of Canada. In accordance with these reporting requirements, we believe the following matters should be brought to the attention of the House.

Observations on Crown Corporations

Improper Use of Appropriations

17.2 Departmental Estimates and eventually the appropriations provided by Parliament make provision for funds to finance activities of Crown corporations. The departments control requisitioning of the funds, responding to requests from the specific corporation for whom the Estimate item was included.

17.3 Departments have a responsibility to inform Parliament in a clear manner before the voting of funds about how these appropriations are going to affect the public purse and, in the Public Accounts, to disclose the use made of the funds that were appropriated. The cash balances and cash flows of Crown-owned corporations should be adequately monitored, and the moneys should be spent in accordance with the authorization given by Parliament.

17.4 Because the Government lacks direct controls over expenditures by Crown corporations, there is an urgent need to develop a policy for controlling the timing of the drawdown of funds for Crown corporations dependent on the public purse and to ensure they are used for the purposes provided.

17.5 The following cases show instances where our review revealed improper use of annual appropriations. These include using appropriations for other than the purpose authorized by Parliament and paying funds in advance of need.

17.6 **Case 1. Cape Breton Development Corporation - Use of capital appropriation for purpose other than that authorized by Parliament.** Cape Breton Development Corporation (DEVCO) is a Crown corporation reporting to Parliament through the Minister of Industry, Trade and Commerce and Regional Economic Expansion. The Corporation is funded by three separate appropriations covering its coal mining operation

losses, its capital expenditures in rehabilitating and developing its coal and railway operations, and its industrial development activities. In 1982-83, total funding by Canada was \$96 million (\$133 million in 1981-82).

17.7 In paragraph 15.10 of our 1982 Report, we observed that in 1981 and 1982 DEVCO had requested and was paid by the Department of Regional Economic Expansion (DREE) amounts totalling \$57 million more than the company expended in those years for the acquisition of capital assets. In 1982-83, DREE paid DEVCO an additional \$71 million for capital expenditures. DEVCO recorded capital expenditures of \$82 million in that year, leaving an excess of \$46 million. Notwithstanding the fact that the Corporation retained the \$57 million it had received in excess of its capital expenditures in the previous years, DREE did not limit the drawdown of DEVCO's 1983 capital appropriation to the difference between amounts expended for capital in 1983 and the amount retained from previous years.

17.8 The \$46 million excess was used by DEVCO to finance its 1983 coal mining operations. The interest earned on the capital appropriations drawn in advance of need was included in income, thus reducing reported operating losses. In 1982-83, operating losses were reported at \$46.5 million, but appropriations for losses in 1983 were only \$12.8 million, for a shortfall of \$33.7 million. The magnitude of the operating losses was not revealed in the 1983-84 Main Estimates; DEVCO is requesting a Supplementary Estimate in 1983-84 of \$33.7 million to cover them. In our opinion, DEVCO's use of excess funds from capital appropriations to finance operating losses is a use of appropriations for purposes other than those voted by Parliament.

17.9 **Case 2. Department of Transport - Drawdown of funds in advance of need for Ridley Island Project.** Our review of Transport Vote 40e (1981-82) revealed that \$20.4 million was provided to the Canada Ports Corporation in advance of need early in 1982, with the approval of the Treasury Board and the Cabinet Committee on Economic and Regional Development. This amount, together with the interest it was expected to earn, was provided to allow the Crown corporation to fulfil its obligation to purchase \$23.0 million worth of shares in Ridley Terminals, Inc. The share purchases were to be made in varying amounts from early 1982 to the second quarter of 1984.

17.10 We believe that, in making this unusual arrangement, central agencies responsible for controlling the funding of Crown corporations have set a dangerous precedent that could weaken parliamentary control over annual appropriations. The drawdown of these funds in advance of need has served to inflate government expenditures in 1981-82 and has resulted in an overstatement of Canada's deficit by \$20.4 million at 31 March 1982.

17.11 Furthermore, the interest earned on the money, expected to be \$2.6 million, creates interest income that will overstate the true profitability of the Crown corporation over the two years that the funds are invested. At the same time, \$2.6 million in program costs have, in effect, been transferred from the Department of Transport and will be reflected as interest on the national debt.

17.12 Case 3. VIA Rail Canada Inc. - Payments in advance of proven need. VIA Rail Canada Inc. (VIA) has realized a substantial additional benefit from funds it received from Canada in advance of proven need. VIA's financial statements for 1979 to 1982 show that the Corporation earned \$21.1 million (\$17 million in 1982) in interest income by investing its surplus funds (most of which were received from Canada) in short-term securities. At 31 December 1981, VIA's investment in short-term securities amounted to \$25 million. By 31 December 1982, this figure had grown to \$129 million.

17.13 The Government of Canada provides VIA with funds for two main purposes: first, to finance its operating deficits in accordance with the terms and conditions of a contract requiring it to provide certain rail passenger services; second, to finance its capital expenditures. The terms and conditions for the provision of capital funds state that "the maximum payment to VIA is limited only by the lesser of the level of capital expenditures approved annually by the Governor in Council or the actual cash needs of VIA for capital contributions."

17.14 Our review of VIA's financial statements suggests a significant time-lag between the Corporation's obtaining funds from Canada and the time it pays its personnel and major suppliers. For instance, since 1 April 1982, the Department of Transport has been providing operating funds to VIA 30 days before the beginning of the month in which the Corporation was to render the services. It is highly unlikely that VIA has been required to pay its suppliers or its personnel on the same basis. Furthermore, the Department acknowledges that at 31 December 1982, VIA had requested and received at least \$24 million from Canada for capital expenditure over and above its actual cash needs for capital contributions.

17.15 We have two principal concerns about providing these funds to VIA in advance of proven need:

- *Cost of financing.* The Department has not adequately considered the cost of financing these payments. Canada has had to borrow and pay interest on the funds advanced to VIA. Accordingly, although VIA is showing substantial interest income in its financial statements, much of this income, in effect, is offset by the interest cost recorded against the national debt of Canada and thus represents a further subsidization of VIA's services by Canadian taxpayers.
- *Distortion of the Public Accounts of Canada.* The practice of drawing funds from the Consolidated Revenue Fund in advance of proven need could, if it were widespread, adversely affect the fairness of the Public Accounts of Canada. For example, program costs are understated by the cost of financing payments in advance of need. Such a cost is recorded by the Department of Finance, although it relates directly to a Department of Transport program activity. In addition, the funding of \$24 million over and above VIA's actual cash needs for capital contributions inflates government expenditures for the Railway Transport activity as long as the Department has not recovered the amount of the overfunding.

17.16 The Department has indicated that it has taken action to address the excess funds which, in its opinion, VIA at present has under its control. Subject to Treasury Board approval, a schedule for repayment of excess funds will be put in place. The Department has sent a reconciliation of the capital funds to VIA for comment and resolution this calendar year. At the time of our audit, the Department had not come to any agreement with VIA.

17.17 These cases illustrate the urgent need for the Government to develop a policy for controlling the timing of the drawdown of funds for Crown corporations dependent on the public purse, to clarify the terms and conditions that govern the existing arrangements for subsidizing VIA, and assess the options for providing VIA with funds to meet its normal working capital requirements.

Audit Reports - Crown Corporations

17.18 Our Office issued audit reports on the accounts and financial statements of 40 Crown corporations during the year, as required by the Financial Administration Act or the individual act incorporating the specific corporation. Our opinion on three of these corporations contained a reservation in respect to their operations. The details are set out below.

17.19 In addition, the auditor's report on the financial statements of Canada Mortgage and Housing Corporation contained a "subject to" reservation. The details of this are also set out below.

17.20 Canadian Dairy Commission - Levies instituted beyond the powers of the Commission. Section 12 (f) of the Canadian Dairy Commission Act empowers the Governor in Council

to make regulations regulating the marketing of any dairy product, including regulations...authorizing the Commission to fix, impose and collect levies or charges from persons engaged in the marketing of any dairy product...and use such levies or charges for the purpose of carrying out its functions under this Act....

Since the establishment of the Canadian Dairy Commission in 1967, no regulation concerning levies has been made pursuant to section 12. We have obtained two separate legal opinions which state that, in the absence of a regulation made by the Governor in Council authorizing the imposition of levies, the Commission is powerless to impose them.

17.21 The Commission assesses levies to cover the cost of disposing of surplus dairy products. Producer levies for the dairy year ended 31 July 1982 amounted to \$169.9 million, of which \$7.8 million was collected direct by the Commission by deduction from subsidy payments to producers. Other deductions are made from payments by processors to producers on delivery of industrial milk and remitted to the provincial marketing boards, which in turn forward them to the Commission.

17.22 The Commission has obtained a legal opinion from the Deputy Minister of Justice that "the fixing, imposition and collection of levies has been validly adopted under the Agricultural Products Marketing Act".

17.23 Notwithstanding this opinion, our audit report to the Minister of Agriculture on the financial statements of the Commission for the year ended 31 July 1982 included a qualification that the producer levies have been instituted without benefit of regulation and are, therefore, beyond the powers of the Canadian Dairy Commission.

17.24 Canadian Saltfish Corporation - Activities beyond its statutory powers. The Canadian Saltfish Corporation was established by the Saltfish Act in 1970 to improve the earnings of primary producers of cured cod-fish. The Corporation has the exclusive right to trade in and market cured cod-fish and its by-products in the Province of Newfoundland and the Lower North Shore of Quebec and is required to buy all cured cod-fish of an acceptable standard of quality offered for sale by the fishermen.

17.25 During the year ended 31 March 1983, the Corporation sold frozen fish products in the amount of \$5.3 million and marketed frozen fish products under a contractual arrangement for a group of companies at a market value of \$17.8 million. These transactions accounted for more than 30 per cent of total sales for the year.

17.26 In our opinion, because the Act specifies the Corporation's rights only in relation to cured cod-fish and its by-products, these sales of frozen fish products were not within the powers of the Corporation under the Saltfish Act. Accordingly, in our audit report to the Minister of Fisheries and Oceans, our opinion on the financial statements of the Corporation for the year ended 31 March 1983 was qualified.

17.27 Loto Canada Inc. - Payments beyond the powers of the Corporation, and other concerns. Loto Canada Inc. was incorporated under the Canada Business Corporations Act in 1976 to conduct and manage a national lottery in accordance with the National Lottery Regulations as authorized by the Criminal Code.

17.28 In August 1979, federal and provincial government representatives came to an understanding that Loto Canada Inc. would withdraw from the sale of lottery tickets effective 31 December 1979 and that the Corporation would then be wound up by the federal government as quickly as legal, financial and administrative requirements permitted. The Minister responsible for the Corporation directed the Board of Directors to begin the orderly windup of the operations effective 21 August 1979. The lottery operations were terminated effective 31 December 1979, and the right to claim prizes expired on 31 December 1980.

17.29 In January 1981, the Corporation began financing research on gaming concepts, including research and development of a sports pool scheme. In August 1981, Cabinet decided that this sports pool scheme would be operated by a new federal agency.

Total payments for research and development of the sports pool scheme from January 1981 to 31 March 1983 amounted to \$1.8 million, of which \$1.2 million has been recovered from the Government of Canada. The Corporation is confident that it will recover the balance. The research on gaming concepts financed by the Corporation formed the basis of documentation leading to passage of the Athletic Contests and Events Pools Act by Parliament on 29 June 1983.

17.30 The Corporation takes the position that this financing was a business decision within its general powers and in support of the intention of the federal government. However, in our opinion, the payments of \$1.8 million were not authorized by the Corporation's Articles of Incorporation, which restrict the business that the Corporation may conduct and manage. Thus, in our opinion, the payments were contrary to the provisions of the Canada Business Corporations Act.

17.31 In view of the fact that Loto Canada Inc. terminated its lottery operations effective 31 December 1979, we are concerned about the high level of administration expenses incurred by the Corporation during the years ended 31 March 1982 and 31 March 1983, amounting to \$779,000. These expenses arose from the continuing existence of this non-operating Corporation and its involvement in financing the research and development of the sports pool scheme. We are also concerned that arrangements have not been finalized between the Corporation and the Government of Canada to effect payment of \$14.4 million surplus funds due to the Receiver General for Canada.

17.32 The above matters were brought to the attention of the Minister of State for Fitness and Amateur Sport in our audit reports on the financial statements of the Corporation for the years ended 31 March 1982 and 31 March 1983.

17.33 On 7 July 1983, the Board of Directors of Loto Canada Inc. passed a resolution to begin immediately the final winding up of the Corporation.

17.34 **Canada Mortgage and Housing Corporation - Questionable legality of Canadian home ownership stimulation payments.** Canada Mortgage and Housing Corporation was constituted as a Crown corporation by an Act of Parliament on 1 January 1946. Its activities are regulated by the National Housing Act, the Canada Mortgage and Housing Corporation Act and, in certain respects, the Financial Administration Act. One of the main activities of the Corporation is to make payments or incur expenses in the process of delivering housing programs on behalf of the federal government.

17.35 The Canadian Home Ownership Stimulation Plan (CHOSP), introduced in the June 1982 Budget, was implemented to stimulate the construction of new housing units, thereby creating employment and improving access to home ownership.

17.36 During the fiscal year ended 31 March 1983, the Corporation disbursed \$538 million under CHOSP. The auditors of the Corporation issued a qualified opinion on the Corporation's financial statements ended 31 December 1982. They also qualified their opinion on the Corporation's statement of account with the Minister responsible for the Corporation and the Minister of Energy, Mines and Resources for the year ended 31 March 1983 with respect to the uncertainty about the authority under which CHOSP payments were made. Identical notes to both statements added that:

The regulatory authority under which CHOSP payments are being made has been challenged by a Co-Chairman of the Standing Joint Committee of the Senate and Commons on Regulations and Statutory Instruments. The objections relate to lack of specific government regulations covering such payments, and lack of security where the payments represent forgivable loans. However, it is the Corporation's opinion that the amounts are properly authorized and secured under the National Housing Act.

17.37 An independent legal opinion obtained by our Office concluded that, notwithstanding the Corporation's opinion, "transactions under the CHOSP are not within the powers of CMHC under the Act".

Observations on Departmental Expenditures

17.38 **Department of Agriculture - Shortfall in the Western Grain Stabilization Account.** The Western Grain Stabilization Act provides stabilization payments to participating grain growers. These payments are made when net eligible grain sale proceeds of all producers for the year are below the specified average. In turn, the Act requires that each participating grain grower pay a 2 per cent levy in respect of the grain sale proceeds received by him and that the government match the levies paid by participants plus 2 per cent of all participating eligible grain sale proceeds (whether or not levies were paid). The Department of Agriculture has interpreted this latter provision as applying only to sales on which levies were paid by participants and not on the total participating eligible grain sale proceeds.

17.39 The intent may well have been that the federal contribution should be equal to double the levies paid by participants. However, a literal interpretation of the Act does not appear to support this, and the Department's legal counsel states that "although the intent of the government was to only pay in relation to amounts actually paid, the plain meaning of the section (41(1)) leads to the other conclusion".

17.40 If the literal interpretation were applied, there would be an estimated \$7.4 million shortfall in government contributions to the Account dating from 1976.

17.41 The Department's latest response to this issue, which has been raised by this Office in management letters since 1980, is dated 29 April 1983 and states that "the wording of the Act will be clarified through legislative amendments."

17.42 Exchange Fund Account - Valuation of gold and accounting for the realized gains on sales of gold. The Exchange Fund Account is an account in the name of the Minister of Finance, governed by the Currency and Exchange Act and administered by the Bank of Canada, to aid in the control and protection of the external value of the Canadian dollar.

17.43 Our audit report to the Minister of Finance for the year ended 31 December 1982 included two accounting matters that should be brought to the attention of Parliament. In our opinion, the accounting policies of the Account in respect of these matters are not in accordance with section 16 of the Currency and Exchange Act. The two matters are:

Gold is recorded at its approximate historical cost and not adjusted to its commodity market value. As a result, income does not include unrealized valuation gains on gold equal to the difference between commodity market value and approximate historical cost.

Realized gains on sales of gold are recorded as valuation gains and taken into income in equal amounts over a three-year period. In our opinion, section 16 of the Currency and Exchange Act requires that these gains be entirely taken into income of the year in which they are realized, and paid over to the Consolidated Revenue Fund within three months after the end of the year.

17.44 Officials of the Department of Finance have prepared proposed amendments to the Act to provide explicit authority for the accounting policies currently being followed by the Account.

17.45 Department of Fisheries and Oceans - Lack of authorization for expenditures for vessel charters. Herring roe is an important resource in the Pacific fishery. To harvest as much herring roe as possible, while practising sound conservation techniques, the Department of Fisheries and Oceans monitors fish stocks by using chartered fishing boats. These chartered craft carry out test fishing to determine optimum times for opening the herring roe fishery in selected areas. However, the Department does not have appropriated funds to pay for these charters. Rather than seeking the funds, it has adopted the practice of allowing vessel owners to catch an amount of fish well in excess of that needed for test fishing and to use the proceeds as payment for chartering the vessels. The cost of charters financed through this practice has been \$1.6 million a year for the past three years. In effect, the Department is bypassing parliamentary control of expenditures through this practice.

17.46 ITC/DREE - Failure to collect debt owed to the Crown. The federal government has provided assistance in the form of repayable contributions of \$103 million toward the design and development of certain aircraft engines by a Canadian corporation. These contributions were made under the Defence Industry Productivity Program (DIPP) operated by the Department of Industry, Trade and Commerce (ITC). Of the total amount of \$103 million, the company had repaid \$32.4 million by the end of March 1983. A further

\$65.3 million was repayable by the end of 1983 under the contractual terms governing the assistance. The remaining \$5 million was repayable under other terms.

17.47 Rather than seeking repayment, ITC obtained approval from Treasury Board in November 1981 for a revised schedule calling for repayments extending to 1988. In proposing this deferral, the Department indicated that, because sales had far exceeded original expectations, the existing contract terms would require the company to make repayments in excess of what it considered to be fair and reasonable. ITC also considered that the company and its foreign parent had met good corporate behaviour guidelines. However, we noted that criteria for fair and reasonable repayments and for good corporate behaviour had not been documented by ITC. The Department also indicated that rescheduling the repayment would provide a further incentive for a proposed expansion program in Canada. However, we could find no agreements identifying the projects for which the money would be used. Under normal circumstances, the contributions would have been repaid, and the company would have entered into specific agreements covering the proposed new projects for which financial assistance was sought.

17.48 The delay in repayment meant that the Consolidated Revenue fund did not receive \$65.3 million to which it was entitled by the end of 1983. We estimated that the difference in value, in 1983 dollars, between the revised repayment schedule extending to 1988 and the repayments due by the end of 1983 as originally contracted for, amounted to an undisclosed subsidy of \$25 to \$30 million.

17.49 **ITC/DREE - Negligence in the payment of a loan guarantee.** Under the Regional Development Incentives Act, the Department of Regional Economic Expansion (DREE) provided assistance for completion of a 22-unit motel facility with restaurant and bar. The assistance was in the form of loan guarantees totalling \$315,000 to a trust company.

17.50 In March 1982, after several defaults in payment, the trust company exercised a power of sale to realize on its security. DREE paid the guaranteed amount of \$315,000 to the trust company, despite major deficiencies in the liquidation procedures.

17.51 The trust company disposed of the motel through public auction, contrary to the terms in the guarantee agreement, which stipulated disposal by public tender or by private sale with DREE's consent. The trust company did not seek a court judgement against the owner, although this too was called for in the guarantee agreement. A corporate guarantee by another company owned by the motel owner also was not called upon. In addition, departmental information indicated that no control was exercised over the chattels of the motel, which could have been sold separately. DREE failed to ensure that a protective bid was placed at the auction so as to minimize the loss to the Crown. Also, DREE was not represented at the auction to ensure that the liquidation proceedings were conducted in the best interests of the Crown.



Motel sold at public auction for \$200. – DREE paid \$315,000 in loan guarantees.

17.52 The motel was sold for a total consideration of \$200 at public auction, notwithstanding that an appraisal conducted by an independent evaluator in 1977 indicated a value of \$393,000, a second independent evaluation in 1978 a value of \$550,000, and a property tax assessment by the Province of New Brunswick in March 1982 a market value of \$309,400.

17.53 The successful bidder resold the property for \$75,200 one day after the auction, and the new owner obtained a mortgage of \$285,000 on the motel within a month. During our review in August 1983, we noted that the motel was operating and that an offer of \$625,000 had been made in May 1983 to purchase the motel property and an adjacent parcel of land.

17.54 **Department of Public Works - Failure to ensure fairness and economy in the spending of public funds in negotiating a lease agreement.** On 29 June 1983, the Department of Public Works obtained Treasury Board approval to enter into a 10-year lease beginning 1 December 1983 to provide occupancy for several government departments and agencies in a newly renovated building in Ottawa, at an annual rate of approximately \$12 million. We noted that the Department, in negotiating for this space, contravened a number of Treasury Board directives related to contracting, acquisition of real property, and office accommodation. The selection process involved evaluating 32 lease proposals, among which this building ranked 24th. Two proposals for new buildings submitted for evaluation were not considered by the Department, although they offered better rental rates and ranked

higher than the renovated building. In addition, the Department did not consider a proposal to lease an office building under construction in downtown Ottawa, even though it was offered at very attractive rates.

17.55 The Department advised us that the decision to negotiate a lease arrangement for the above building, rather than enter into negotiations with other bidders, was made because of the perceived urgent need of one agency.



Renovated office building - \$12 million annual rental

17.56 The Department's submission to Treasury Board stated that the fit-up costs would be 35 per cent above cost guidelines and that full occupancy by 1 December 1983 would be impossible. To date, no Treasury Board approval has been obtained for specific fit-up costs, and no specific fit-ups have been undertaken. Under the arrangement approved by Treasury Board, rental payments start 1 December 1983. If the premises are unoccupied

because of the time required for fit-ups, unproductive rental payments of up to \$1 million a month could result.

17.57 Department of Public Works - Buildings acquired and either not utilized or under-utilized. In 1981, we reported that an 11,152 square-metre building, purchased by the Department for \$1.98 million in 1976, was still vacant. The Department advised us, at that time, that the building would be ready for occupancy in 1983.

17.58 The Department now advises us that the building is still unoccupied. No occupancy is anticipated before April 1984, and then only if a further expenditure of an estimated \$19.6 million is made for completing and fitting up the existing space and constructing an extension to the building.

17.59 To date, costs associated with this non-productive acquisition, exclusive of the original purchase price, are approximately \$1.96 million for heating, consultant design fees, grants in lieu of taxes and imputed interest charges.

17.60 A review of departmental vacancy reports showed that other buildings have remained unoccupied since the date of purchase or have remained vacant for extended periods. We noted that three buildings in the National Capital Region with a total rentable space of 49,400 square metres, had been vacant from two to five years. Their direct operation and maintenance cost was \$2.9 million, and the foregone annual rental revenue, calculated by the Department, amounted to \$7.7 million.

17.61 Department of Public Works and Harbourfront Corporation - Failure to provide essential information and obtain appropriate authority. The Department of Public Works recommended to the Treasury Board and the Minister of Public Works that an eight-storey warehouse building, together with the associated lands held by the Department, be conveyed to the Harbourfront Corporation for condominium development purposes. The Department failed to advise them that the Harbourfront Corporation, or the Crown, would be obliged to maintain the refurbished warehouse building in perpetuity to support the four storeys of residential condominium units constructed on top of it by a private developer. The Harbourfront Corporation, as the owner of the refurbished building and the land on which the whole structure stands, will also have to ensure perpetual easement and access rights for the condominium owners.

17.62 In accepting the Department's recommendation, the Treasury Board directed the Department to ensure that the development would not entail an indirect subsidy to the condominium purchasers or the developer. The Department advised us that it was not able to comply but has not informed Treasury Board of this fact.

17.63 The property in question, which formed the major part of an expropriation by the Department in 1972 for \$9.4 million, was conveyed to Harbourfront Corporation for a nominal sum of \$1.

17.64 The management agreement between Her Majesty the Queen, as represented by the Minister of Public Works, and the above Crown-owned corporation states that the Corporation should not enter into condominium development agreements without the prior approval of the Minister of Public Works and the Deputy Attorney General of Canada. However, the Corporation entered into major condominium development agreements without obtaining the authority as stipulated.

17.65 As a result, the Crown, without Treasury Board having essential knowledge of the pertinent facts, has assumed obligations in perpetuity, and major Crown assets have been transferred to the Corporation for its own specific use at a nominal cost.

17.66 **Department of Public Works - Contravention of the Government Contracts Regulations.** In our 1982 Report, we noted a number of weaknesses in government contracting practices. We view with concern the Department of Public Works' failure to comply with the Government's competition policy, which was designed primarily to ensure consistency, economy, and fairness in selecting and procuring consulting services.

17.67 During 1982-83, the Department of Public Works entered into agreements with 14 architectural and engineering consulting firms without holding competitions. In each case, the agreement was in excess of the mandatory threshold of \$100,000, and together the agreements committed the Department to expenditures in excess of \$8.8 million.

17.68 Section 8 of the Government Contracts Regulations allows a contracting authority to enter into a contract for acquiring construction-related architectural, engineering and other services without inviting tenders where the expenditure does not exceed \$100,000.

17.69 The Regulations were last revised on 20 September 1982, when the threshold for mandatory tendering for the services of consulting architects and engineers was raised from \$30,000 to \$100,000. In approving the new threshold, Treasury Board Ministers noted that the Department of Public Works would, from then on, be expected to comply with the Government Contracts Regulations and Treasury Board contracting policy.

17.70 **Department of Public Works - Cost of \$697,000 attributable to deficient wording in a lease drawn up by the Department.** Because of a deficiency in the wording of a lease agreement entered into by the Department of Public Works, the Crown has been compelled to pay additional rent amounting to \$697,000 to a landlord in an out of court settlement.

17.71 The lease agreement was for a term of five years, beginning 1 December 1975, at an annual rental of \$732,874, and called for additional payments of \$263,775 a year over the lease term to cover amortization of the cost of improvements made by the lessor.

17.72 The agreement included a renewal option clause which gave the Department the right to renew the lease on the same terms and conditions. The renewal clause did not clearly specify that the renewal would be at the original rental rate only. As a result, when the Department renewed the lease, the lessor claimed additional annual rental payments of \$263,775 over the three-year renewal period.

17.73 A legal opinion obtained by the Department concluded that the court would hold the Crown liable for the "additional rent" payments made during the renewal period. Accordingly, the Department settled the claim for \$697,000, representing approximately 87.5 per cent of the additional rent claimed by the lessor plus the plaintiff's court costs, amounting to \$5,000.

17.74 **Department of Transport - Up-front payments of \$72 million made to a CN Marine contractor without adequate security.** The Department of Transport made three up-front payments, totalling \$72 million, to Davie Shipbuilding Limited, a subsidiary of Dome Petroleum. The payments were made through the Canadian National Railway Co. (CN) and CN Marine, in connection with the construction of a vessel identified as the *Gulfspan*. These payments were not adequately secured and were made in advance of need - approximately six months before construction was scheduled to begin.



Artist's drawing of the vessel Gulfspan.

17.75 CN Marine was incorporated as a subsidiary of CN in 1978. An agreement between three parties – the Minister of Transport, CN and CN Marine – established the terms and conditions under which CN Marine would provide Atlantic ferry services. The agreement required that the Minister of Transport should be satisfied with the form and timing of each capital project to which the Department contributed and that every project should be necessary to enable CN Marine to provide the agreed water transportation services. The Minister was also required to be satisfied that all requests for funding capital projects were justified. The construction of the *Gulfspan* was such a capital project.

17.76 The lowest bid for the vessel was \$130 million. However, pursuant to a government decision to keep the cost under \$127 million, the Department negotiated a lower price with Davie Shipbuilding by agreeing to accelerate the payment schedule for the vessel. The new schedule allowed the company to reduce the vessel's price by \$9 million to \$121 million. Under the revised schedule, payments of \$23.5, \$18.4 and \$30 million were advanced to the shipbuilder in January, February and April 1983 respectively. However, construction of the vessel was not due to begin until September 1983.

17.77 The immediate need for the construction of this vessel, from a transportation point of view, was questioned by the Department. We were informed that all the pros and cons of this project were presented and all necessary approvals obtained before these financial arrangements were entered into. However, we have two principal concerns about the advance of the \$72 million:

- *Lack of adequate security.* The \$72 million in up-front payments (60 per cent of the contract price) was not adequately secured. We were told that Davie Shipbuilding could not provide a performance bond. Instead, its parent company, Dome Petroleum Limited, provided a letter of guarantee. Normal business practice requires a performance bond and not a letter of guarantee. Nevertheless, the money was advanced, placing taxpayers' money at abnormal risk.
- *Vessel cost understated.* Davie agreed to reduce the price of the vessel by \$9 million (7 per cent of the contract price) in return for accelerated payments. However, Canada presumably had to borrow and pay interest on the funds it had advanced to Davie. Therefore, in effect, \$9 million in program costs were transferred from the Department of Transport and will be reflected as interest on the national debt.

17.78 **Department of Transport - Payments of \$282 million made to railways without enabling legislation.** On 1 February 1983, the Government announced that the Minister of Transport would table a comprehensive bill in Parliament that would replace the existing fixed Crowsnest Pass freight rate with a new grain transportation program. The railways were informed that the Government would seek authority from Parliament to provide compensation to the railways for revenue losses incurred in the 1982-83 crop year.

17.79 Pending introduction of this legislation, the Department of Transport (DOT) sought and obtained spending authority of up to \$130.4 million through Final Supplementary Estimates 1982-83 in DOT's Vote 65 - Contributions. In April 1983, payments of \$65.2 million each were made to Canadian National Railway Company and Canadian Pacific Limited. These payments were to compensate the railways for losses incurred from August to December 1982 of the 1982-83 crop year in transporting western grain at the current statutory rate, and the Government expected they would use the money to upgrade their grain handling capacity. Additional contributions for the crop year 1982-83 of \$53 million relating to the period January to March of the fiscal year 1982-83 and \$99 million for the period April to July of 1983 were authorized in Supplementary Estimates "A" 1983-84 and paid to the railways in July 1983.

17.80 We were informed that these interim payments were made in order to expedite a new government program, despite the fact that Parliament had not finished debating the policy or passed the proposed enabling legislation.

17.81 The Speaker of the House of Commons has, in the past, ruled that appropriation acts are not the place to seek authority to do something such as establishing a new program. The appropriation act should only seek authority to spend money for a program that has been previously authorized by a statute. Similarly, according to parliamentary rules, "if a Vote in the Estimates relates to a bill not yet passed by Parliament, then the authorizing bill must become law before the authorization of the relevant Vote in the Estimates by an appropriation act".

17.82 We have two major concerns. First, we believe that approving the \$282 million in payments while enabling legislation was still under review runs counter to the rules and spirit governing the parliamentary system. The procedure used in this case bypasses normal parliamentary safeguards against decisions with respect to public expenditure on new programs. Second, the authority sought for expenditure for 1982-83 did not reflect the known compensation due to the railways for all the revenue loss subject to subsidy during the fiscal year. As explained earlier, the \$53 million has not been recorded as an 1982-83 expenditure. In our opinion, this unrecorded amount understates the Department's actual expenditures.

17.83 **Department of Transport - \$46.8 million double payment made to CN not recovered.** In paragraph 15.6 of our 1981 Report, we stated that the Canadian National Railway Co. was being reimbursed twice for losses incurred: first, when the deficits that included these losses were reimbursed by the Department of Transport under annual appropriation acts; second when payments were made by the Canadian Transport Commission (CTC) under the Railway Act in 1978, 1979 and 1980.

17.84 The Public Accounts Committee, following its hearing on this subject held on 18 May 1982, recommended that:

- the Department of Transport take measures to ensure that double benefits do not occur; and
- the Government resolve the question of double benefits to CN and report back to the Committee by 31 December 1982.

17.85 The Department of Transport has determined that the amount of the double payment to CN is \$46.8 million. In December 1982, the Minister, on advice from the Department, proposed to CN that, rather than raise a claim to recover the double payment, this amount be formally incorporated into its outstanding consolidated loan from the Government of Canada. The Public Accounts Committee was also informed on the course of action proposed by the Department.

17.86 However, the Department requires parliamentary approval prior to an increase in its loans to CN. In spite of this, CN has chosen to show in its financial statements for the year ended 31 December 1982 the amount owing to Canada as a long-term debt.

17.87 We have been informed by the Department that a Treasury Board submission has been prepared that puts forward the loan option. However, Treasury Board has not yet concurred with the proposed departmental approach.

17.88 **Department of National Revenue (Taxation) - Incorrect assessments of 1982 income tax returns.** The Federal-Provincial Fiscal Arrangements and Established Programs Financing Act, 1977, provides for tax collection agreements between the federal government and the provinces and territories. All territories and provinces, with the exception of Quebec, have signed such agreements with respect to taxes on incomes of individuals. Under the terms of the agreements, National Revenue - Taxation (NRT) is responsible for administering and enforcing these territorial and provincial income tax acts.

17.89 Current forward averaging provisions for individuals, which were introduced for 1982, allow qualifying taxpayers to elect to spread certain income received in one year over future years. Anticipating that specific changes would be made to territorial and provincial income tax acts in connection therewith, NRT prepared its 1982 tax forms to reflect the anticipated amendments. However, these amendments have not yet been enacted. As a result, NRT has incorrectly assessed certain taxpayers who elected to take advantage of forward averaging provisions in 1982. In addition to being contrary to the law, this current assessing practice will result in inequities for some taxpayers.

17.90 For example, taxpayers using forward averaging who reside outside Quebec but have business income in Quebec would be taxed twice at the provincial level on the forward averaged amount that is subject to Quebec income taxes.

17.91 Neither NRT nor the Department of Finance has quantified the effect of the incorrect assessments.

17.92 Use of appropriations granted by Parliament. For the year ended 31 March 1983, 4 of 30 government departments reported overexpended appropriations. The total amount reported as over-expended was approximately \$29 million and is presented in the Government's 1983 Statement of Use of Appropriations which forms part of the Audited Financial Statements of the Government of Canada, reproduced in Appendix D of this Report. Details by department, as provided in Volume II of the 1983 Public Accounts of Canada, are shown in Exhibit 17.1.

17.93 In paragraph 15.8 of our 1981 Report, we called attention to the need to amend the Financial Administration Act (FAA) to clarify the legal authority for the Government's Payables at Year End (PAYE) policy. In paragraph 15.14 of our 1982 Report, we stated that it was our understanding that proposals for an appropriate amendment to the FAA would be presented to Parliament in the near future. The FAA has not yet been amended.

17.94 An appropriation available for current year spending is the amount granted by Parliament, reduced by debts under PAYE that gave rise to any overexpenditure reported in the prior year. The reduction is called a reserved allotment and constitutes payment authority for settling such prior year debts. In 1982, overexpenditure reported by the Department of National Defence (DND) included debts owing for contract holdbacks of \$10,460,894. In 1983, DND with the concurrence of Treasury Board, did not include this amount in its reserved allotments as required by PAYE. As a consequence, the authority reported as being available for 1983 spending is overstated, and amounts reported as lapsed and overexpended in that year are inaccurate. If PAYE had been followed, DND Vote 5, which is reported in Exhibit 17.1 as overexpended by \$10,495,852, would be overexpended by \$19,032,202. DND Vote 1, which is reported as having lapsed \$42,628,109, would have lapsed \$40,703,565.

1983 IMPAC Progress Review

Introduction

17.95 The effort by the Office of the Comptroller General to bring about an improvement in management practices and controls (IMPAC) in departments and agencies is a unique initiative in government. It deals with the processes by which programs are planned, controlled and evaluated so that departmental operations will be more economical, efficient and effective.

17.96 IMPAC was designed to survey the state of management practices and controls in departments and agencies, to identify deficiencies, to develop individual action plans to remedy identified deficiencies, and to support the implementation of these plans. Typical IMPAC action plans include projects covering such key areas as:

OVEREXPENDED APPROPRIATIONS

Department and Vote	Appropriations		
	Granted	Used	Overexpended
Industry, Trade and Commerce			
Vote 25 - Payments to companies engaged in ship repair on the Canadian East and West Coasts for the construction of dry docks and supporting facilities.	\$ 9,393,251	\$ 9,544,144	\$ 150,893
Vote 45 - Tourism Program	44,710,215	46,952,475	2,242,260
National Defence			
Vote 5 - Capital Expenditures	1,522,604,000	1,533,099,852	10,495,852
National Health and Welfare			
Vote 10 - Grants and Contributions	119,935,585	133,896,866	13,961,281
Transport			
Vote 70 - Payments to CN Marine Inc. and Canadian National Railway Company pursuant to contracts with Her Majesty.	152,872,000	153,062,594	190,594
Vote 105 - CTC - Contributions, including contributions for the purposes set out in Subsection 20(1) of the Railway Relocation and Crossing Act except those related to the construction, reconstruction and improvement of a grade separation where payment was not ordered prior to 1 September 1977.	24,350,265	26,583,585	2,233,320
Total Overexpended			<u>\$ 29,274,200</u>

- planning – developing departmental planning systems, establishing strategic objectives, short and long-term operational plans;
- financial function – developing systems and procedures for improving financial management and control;
- information systems – developing management, operational and financial information systems;
- program evaluation function – developing a program evaluation infrastructure to assist in ensuring that deputy heads of departments and agencies have appropriate information on the results of their programs;
- internal audit function – developing the internal audit infrastructure to ensure that departments have an independent review and appraisal of all departmental operations for the purpose of advising management as to the efficiency, economy and effectiveness of internal management practices and controls; and
- others – for example, human resource planning, personnel training projects, and other areas not included above, such as projects to meet new requirements of central agency policies (PEMS, Part III of the Estimates, etc.).

17.97 Monitoring of IMPAC by this Office is carried out in response to a request from the Public Accounts Committee and is designed to provide the House of Commons with an independent, ongoing review of the status of the IMPAC process and the implementation of individual departmental action plans.

Scope of Progress Review

17.98 Our 1983 review of the IMPAC process included all departments surveyed by the Office of the Comptroller General (OCG) as part of the IMPAC process before 31 March 1982 and focused on:

- the status action plans; and
- progress in implementing action plans to 31 March 1983.

17.99 Information for this review was provided by the departmental IMPAC co-ordinators and the liaison officers of the Office of the Comptroller General.

17.100 We integrated the IMPAC review with our comprehensive audits of departments and agencies. Consequently, chapters reporting on comprehensive audits, as well Chapter 3, our government-wide study of program evaluation, provide audit-based opinions, where reasonable and appropriate, on management practices in the key areas covered by IMPAC action plans.

Status of Action Plans

17.101 In total, 30 departments were surveyed as part of IMPAC from 1979 to March 1982. These entities account for about 85 per cent of government expenditures, excluding the public debt.

17.102 Three departments included in the IMPAC survey became disengaged from the process. The Treasury Board Secretariat stated that its management practices and controls had been improved to such an extent that further OCG involvement was no longer required. In the case of the Department of National Defence, the OCG rated its management systems as satisfactory and did not require the preparation of an action plan. The Post Office Department's establishment as the Canada Post Corporation placed it outside the OCG's mandate.

17.103 At 31 March 1980, the OCG had endorsed six action plans; that is, approved their content, costs and implementation strategy. In the following two years, the number of endorsed action plans increased to 18 and 25, respectively. By 31 March 1983, the number had risen to 27, representing about two-thirds of government expenditures.

17.104 Exhibit 17.2 shows the status of the 27 action plans at 31 March 1983, in terms of endorsement and expected completion dates as well as budget and cost data. Endorsed plans for the Departments of Industry, Trade and Commerce and Regional Economic Expansion were terminated because of government reorganization. Progress in the remaining 25 departments is summarized in Exhibit 17.3. In 21 of these departments, implementation is in progress. In three, action plans are under revision. Most action plans have undergone some degree of revision in content or timing; however, 7 of the 27 plans underwent major revisions and were re-endorsed by the OCG.

17.105 Project work is complete on two plans (DSS-Supply and Employment and Immigration), and the official sign-off from the OCG is pending.

17.106 Two departments, DSS-Services and National Revenue-Taxation, have "graduated" from the IMPAC process. This term is used by the OCG to indicate that the completed action plan has been reviewed, validated, judged satisfactory and signed off.

17.107 Exhibit 17.2 also shows the costs estimated by departments. In the 22 departments for which they could be identified, estimated committed costs for IMPAC were \$238.6 million, including 3,500 person-years. About \$177.3 million had been spent at 31 March 1983. Because the cost figures to date have not been compiled in a uniform manner, their accuracy cannot be assessed.

17.108 As of 31 March 1983, the OCG identified tangible benefits of \$126.6 million (annually recurring) and \$16.6 million (non-recurring) as a result of the IMPAC process.

STATUS OF ACTION PLANS - 31 March 1983						
DEPARTMENTS AND AGENCIES ¹ (With Endorsed Action Plan)	ACTION PLAN DATES		Action Plan Status ²	ACTION PLAN BUDGET AND COSTS		
	Original Endorsement Date	Expected Completion Date		Total Budget (\$ millions)	Costs-to-date (\$ millions)	
1. National Health and Welfare	Nov. 1979	Mar. 1985	R, Ongoing	\$ 14.3	\$ 6.2	
2. RCMP	Dec. 1979	Oct. 1984	R, Ongoing	\$ 2.3	\$ 1.5	
3. DSS - Services	Dec. 1979	Mar. 1981	Graduated	\$ 3.0	\$ 1.6	
4. Energy, Mines and Resources	Dec. 1979	Mar. 1984	R, Under Revision	\$ 1.7	\$ 2.1	
5. Employment and Immigration ³	Feb. 1980	June 1983	Completed	Not Separately Identified	\$ 61.3	
6. Agriculture	Mar. 1980	Mar. 1987	Ongoing	\$ 17.1	\$ 8.7	
7. Public Works	Apr. 1980	Apr. 1984	Ongoing	\$ 42.9	\$ 15.8	
8. Environment	Sep. 1980	Apr. 1985	R, Ongoing	\$ 12.0	\$ 6.9	
9. CIDA	Dec. 1980	Dec. 1985	Ongoing	\$ 21.1	\$ 10.1	
10. Veterans Affairs	Dec. 1980	Mar. 1984	Ongoing	\$ 22.9	\$ 15.4	
11. Customs and Excise	Jan. 1981	Dec. 1987	Ongoing	\$ 12.6	\$ 5.6	
12. DSS - Supply	Feb. 1981	Dec. 1981	Completed	\$ 1.5	\$ 1.3	
13. Correctional Service	Mar. 1981	Apr. 1984	Ongoing	\$ 8.7	\$ 6.0	
14. Consumer and Corp. Affairs	Mar. 1981	Mar. 1985	R, Ongoing	\$ 1.5	\$ 0.8	
15. Canadian Transport Comm.	Mar. 1981	Mar. 1986	R, Ongoing	\$ 5.4	\$ 2.8	

16.	National Revenue - Taxation ⁴	Mar. 1981	Apr. 1986	Graduated	\$ 1.7	\$ 1.9
17.	Regional Econ. Expansion ⁵	Mar. 1981		Terminated	\$ 2.3	\$ 0.6
18.	Secretary of State	May 1981	Mar. 1984	R. Ongoing	\$ 2.4	\$ 1.4
19.	National Museums	May 1981	June 1983	Under Revision	\$ 1.2	\$ 0.8
20.	Industry, Trade and Commerce ⁵	June 1981		Terminated	\$ 1.7	\$ 0.3
21.	Labour	June 1981	Mar. 1984	Ongoing	None	\$ 0.8
22.	Justice	July 1981	Mar. 1985	Ongoing	\$ 2.5	\$ 0.4
23.	Indian Affairs & North. Dev.	July 1981	Apr. 1985	Ongoing	\$ 26.7	\$ 10.1
24.	Transport	Nov. 1981	Mar. 1985	Ongoing	\$ 23.8	\$ 8.1
25.	Statistics Canada	Apr. 1982	June 1985	Ongoing	\$ 4.8	\$ 0.9
26.	External Affairs	May 1982		Phase II Under Development	None	\$ 4.9
27.	Fisheries and Oceans	May 1983	June 1985	Ongoing	\$ 4.5	\$ 1.0
				TOTALS	\$238.6	\$177.3

Footnotes:

- 1 IMPAC surveys were conducted for an additional three departments, although no endorsed action plans were developed. Post Office Corporation, Treasury Board Secretariat and National Defence are classified by the OCG as disengaged from the IMPAC process.
- 2 The letter 'R' indicates that the departmental action plan has been revised, one or more times, since it was first endorsed by the OCG.
- 3 This figure includes expenditures prior to IMPAC initiatives, development costs, and ongoing operational costs.
- 4 NR - Taxation work on action plan is ongoing but OCG signed off.
- 5 Parts of ITC and DREE will be integrated into the proposed new department DRIE, which has its own, OCG endorsed, Action Plan (19 April 1983). Work on the action plans of ITC and DREE terminated 12 January 1982.

Deputy heads in many departments and agencies have formally committed themselves to achieving a further \$128.8 million of potential benefits. We did not review these figures. Confirmation of these potential benefits could be one of the subjects of the evaluation of the IMPAC process planned by the OCG for 1984.

Progress in Implementing Action Plans

17.109 Departmental progress. Exhibit 17.3 shows the overall rate of progress achieved by the 25 departments currently working on their action plans.

17.110 Progress is summarized according to information supplied by departments; a standard indicator was selected that permitted a reasonable measure of progress. This indicator, shown in Exhibit 17.3, is the number of completed tasks as a percentage of the total number of tasks in a particular action plan. A task in this context means a project activity, with clearly defined starting and completion points, undertaken to improve some aspect of management procedures and controls.

17.111 It is important to emphasize that Exhibit 17.3 shows only the progress made by each of the 25 departments in implementing its action plan, according to a common indicator of progress. Other comparisons were not possible because of the unique nature of each action plan in terms of content as well as complexity and size. For example, the plan for National Revenue-Taxation contains 10 projects, while plans for Transport Canada and Veterans Affairs contain 82 and 74 projects respectively.

17.112 Progress in key IMPAC areas. Exhibit 17.4 shows the progress in implementing action plans for the six key IMPAC functional areas by aggregating the information for 25 departments.

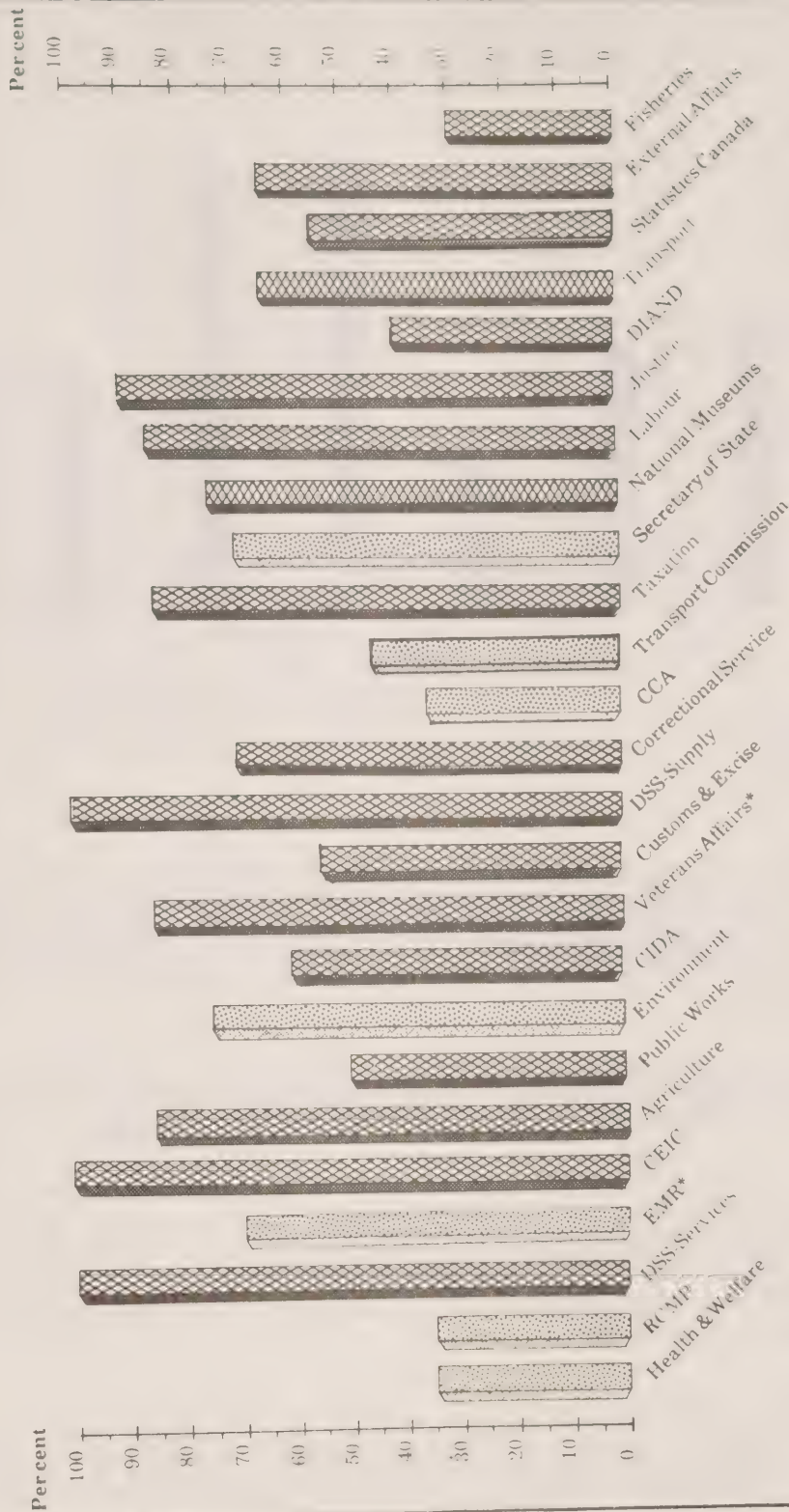
17.113 It shows that departments have made notable overall progress during the past three years in establishing and improving the infrastructure for the internal audit and program evaluation functions. Reasonable progress has been made in improving the infrastructure for the planning and financial management functions. Progress in establishing management information systems is slow; however, it should be noted that projects in this area are often very complex, costly and time consuming.

Conclusion

17.114 Improvements to management systems continue to be made by departments as a result of the IMPAC process. While progress in implementing action plans varies considerably among departments and agencies, completed tasks as a percentage of total planned IMPAC tasks increased from about 40 per cent at the end of 1981-82 to about 65 per cent at March 1983.

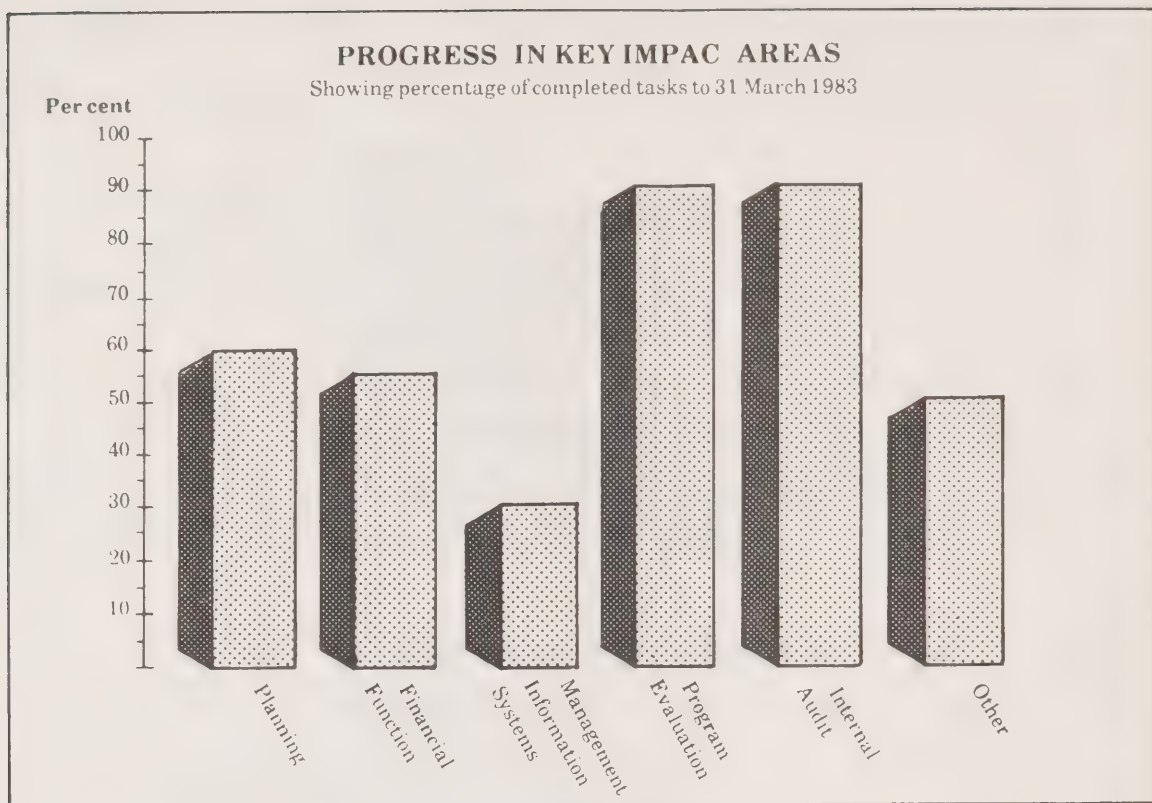
PROGRESS IN IMPLEMENTING ACTION PLANS AS REPORTED BY DEPARTMENTS

Showing percentage of completed tasks to 31 March 1983



*Pending review and validation OCG cannot confirm or reject these departmental claims.

Original Plans
Revised Plans



17.115 In 1981, we commented on the need for evaluating the success of IMPAC as a whole. The Comptroller General advised the Public Accounts Committee in 1982 that he planned to conduct a formal evaluation of the program in 1984. Such an evaluation should provide an assessment of the achievements of the IMPAC program and its effectiveness in meeting its objectives.

Report Under Section 11 of the Auditor General Act on Our Continuing Review of the Oil Import Compensation Program

17.116 In 1974, at the request of the Governor in Council, we began a continuing inquiry under Section 62 of the Financial Administration Act into the administration of expenditures of the Oil Import Compensation Program. When the Petroleum Compensation Revolving Fund was established in 1978, we included it in our inquiry because expenditures from the Fund were made under the same legislative authority that applied to the Oil Import Compensation Program.

17.117 Section 50 of Bill C-103 to amend the Petroleum Administration Act eliminated the Petroleum Compensation Revolving Fund. The Fund was replaced by the Petroleum Compensation Accounting process, as set out in the Canada-Alberta

Memorandum of Agreement and provided for by section 77 of the Act. This represents a broader concept of pricing and compensation for oil products under which all compensation payments are funded by a single charge. Thus, expenditures under the Oil Import Compensation Program and the revenues and expenditures of the Petroleum Compensation Revolving Fund have been brought together.

Petroleum Compensation Accounting Transactions

17.118 The following table summarizes the revenue and expenditure transactions for 1982-83.

		(Millions of dollars)
Revenue		
Petroleum Compensation Charge		\$ 3,031
Expenditures		
Oil Import Compensation		1,398
New Oil Reference Price		454
Special Old Oil Price		190
Synthetic Oil Supplement Program		916
Domestic Transfers Compensation Program		37
Crude Oil Exchange Program		<u>1</u>
		<u>2,996</u>
Surplus		<u><u>\$ 35</u></u>

To establish the appropriate level for the Petroleum Compensation Charge, and given the commitment to balance compensation revenues and expenditures by the end of 1986, surpluses or deficits are carried from one year to the next through the rate setting mechanisms.

17.119 Audit scope. This year, we audited major segments of the Energy Program of the Department of Energy, Mines and Resources. Our findings on the Program are in Chapter 9 of this Report.

17.120 We examined the revenue and expenditure transactions of the Petroleum Compensation Accounting process in accordance with generally accepted auditing standards and, accordingly, included such tests and other procedures as we considered necessary in the circumstances.

17.121 Audit observations. One levy payer owes \$26.2 million to the Crown in unpaid levies. Departmental officials have been monitoring this situation from the beginning and are making arrangements with the levy payer for the repayment of arrears.

17.122 Litigation. At the date of our audit, two legal matters were outstanding.

17.123 A legal action had been taken by an importer to recover \$3.7 million of compensation paid to the Minister of Energy, Mines and Resources pursuant to a decision by the Minister that the importer had used an incorrect method of deducting exports of previously compensated oil. A judgement was rendered by the Federal Court of Canada on 3 June 1983 dismissing the recovery claim against the Crown. The importer has subsequently filed an appeal of that decision.

17.124 The other matter was a legal action taken by the Trustee in Bankruptcy for an importer, challenging the right of the federal government to offset \$5.2 million in import compensation due to the importer against the amount owing by the importer to another federal government department. A defence had been filed; however, no further action had been taken by the plaintiff.

17.125 Conclusion - financial transactions. In our opinion, revenues and payments for the fiscal year ended 31 March 1983 have been properly processed and are in conformity with applicable legislation and regulations.

**ORGANIZATION AND PROGRAMS OF
THE OFFICE OF THE AUDITOR GENERAL**

ORGANIZATION AND PROGRAMS OF THE OFFICE OF THE AUDITOR GENERAL

Table of Contents

	Paragraph	Page
Introduction	18.1	553
Organization of the Office	18.2	553
Audit Operations	18.5	554
Professional Services	18.10	556
Administrative Services	18.16	557
Executive Office	18.22	558
Advisers to the Auditor General	18.26	558
Reporting Responsibilities	18.29	560
Public Accounts Committee	18.32	561
Office Resources	18.33	561
International Activities	18.38	562
Official Languages	18.45	564
Retirements	18.47	564
Appropriations and Expenditures	18.48	564
Exhibits		
18.1 Plan of Organization		555
18.2 Appropriations and Expenditures		565

ORGANIZATION AND PROGRAMS OF THE OFFICE OF THE AUDITOR GENERAL

18.1 The Auditor General is an Officer of Parliament, governed by the mandate set out in the Auditor General Act, reproduced as Appendix A to this Report. Pursuant to that mandate, the Auditor General has stated that his mission is:

- To make independent examinations of the accounts of federal departments and agencies and of other entities for which he is the appointed auditor, and to express his opinion on their integrity.
- To make such independent examinations and inquiries as he considers necessary and, based on them, to report on whether or not there were significant deficiencies in the management control systems and practices in the audited entity during the period under examination; thereby providing reasonable assurance, where possible, that:
 - public assets are safeguarded and controlled;
 - transactions are lawful and proper;
 - financial, human and physical resources are managed with due regard to economy and efficiency, and procedures are in place to measure and report the effectiveness of programs.
- To call attention to anything that he considers to be of significance and of a nature that should be brought to the attention of the House of Commons, to communicate his findings and observations to management of the audited entity and to make any constructive recommendations he may have.
- To maintain the stature of his Office, share its expertise with Canadian and international colleagues, and contribute to the development of comprehensive audit methodology and practices.
- To manage his Office with due regard for economy, efficiency and effectiveness, ensuring professional and administrative competence and adherence to applicable government policies.

Organization of the Office

18.2 The organization of the Office of the Auditor General is designed to produce efficient and cost-effective audits, thereby serving audited organizations constructively and meeting the needs of its principal client, the House of Commons.

18.3 The overall direction of the Office is the responsibility of the Auditor General. He exercises this responsibility as Chairman of an Executive Committee, comprising the Deputy Auditors General.

18.4 The Office contains four Branches. The Audit Operations Branch is the heart of the organization. The other branches, Professional Services, Administrative Services and the Executive Office, essentially serve to support the work of Audit Operations. Exhibit 18.1 shows the organization of the Office.

Audit Operations

18.5 The Audit Operations Branch plans and conducts the audits of federal departments and agencies and of other entities for which the Auditor General is the appointed auditor. The organization of the Branch reflects the Government's Policy and Expenditure Management System (PEMS). The 10 major expenditure areas or envelopes of PEMS are audited by teams that concentrate in those areas. This approach provides greater continuity in the audit process and improved understanding of issues, resulting in better relationships with clients.

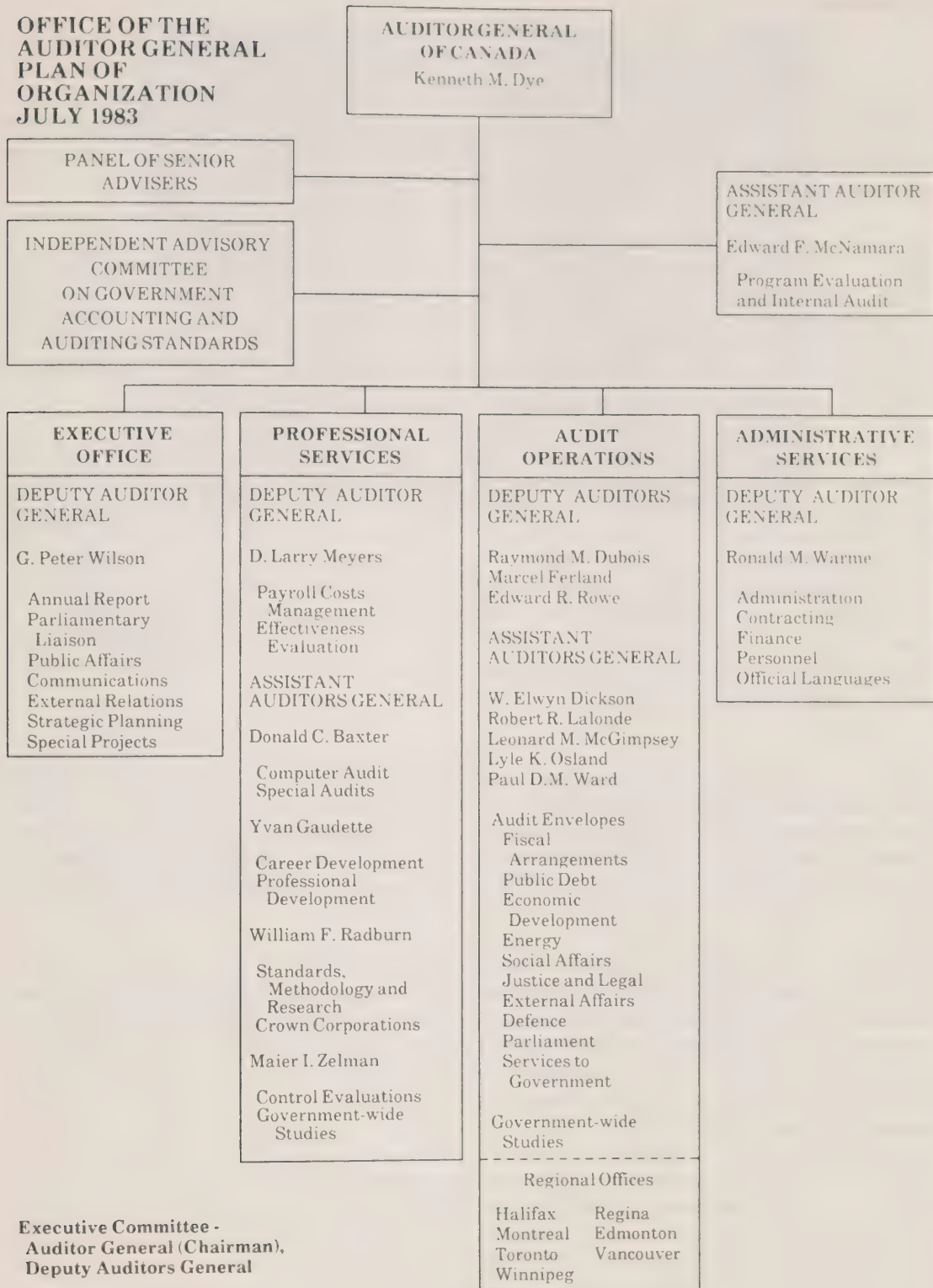
18.6 The Branch employs some 260 auditors in Ottawa and in seven regional offices located in Halifax, Montreal, Toronto, Winnipeg, Regina, Edmonton and Vancouver. They are responsible for auditing approximately 150 entities, covering the 10 major expenditure areas. The Branch also uses specialist staff of the Professional Services Branch to assist in conducting comprehensive and government-wide audits.

18.7 Senior staff of the Branch attend meetings of audit committees of some departments and Crown corporations. The Branch also co-ordinates the Office's relationship with the external auditors of those Crown corporations where the Auditor General is not the appointed auditor.

18.8 Audit Operations is responsible for the audit assignments of students on the staff who are enrolled in programs leading to the designation of Chartered Accountant, Certified General Accountant or Registered Industrial Accountant. During these assignments, students receive the practical experience needed to meet requirements for such professional accreditation.

18.9 Audit Operations Branch staff are regularly called on to participate in special projects initiated by the Executive Office, Professional Services and Administrative Services Branches. These projects include international audits, government-wide projects, development of audit methodology, financial and administrative tasks, and professional development courses.

**OFFICE OF THE
AUDITOR GENERAL
PLAN OF
ORGANIZATION
JULY 1983**



Professional Services

18.10 The Professional Services Branch supports the Audit Operations Branch by providing, through five groups, the additional knowledge and skills needed to carry out comprehensive audits. This is achieved through a combination of written guidance and training programs prepared for professionals in audit operations and by supplying advice or specialists to perform audits. To ensure that the audit process is effective, the Branch also performs a quality control function.

18.11 The Crown corporations group is responsible for providing direction and advice on general accountability issues relating to Crown-owned entities with a view to ensuring greater consistency and efficiency in audits conducted in Crown corporations. During the year, this group held a one-day workshop on "Legislative Auditing in Crown Corporations", attended by private sector auditors of Crown corporations and other involved in legislative audits.

18.12 The Standards, Methodology and Research group is responsible for developing and maintaining auditing standards, managing auditing methodology development, and conducting auditing research. Audit Guides dealing with such subjects as "Auditing EDP: Planning the EDP Audit" and "Auditing the Planning of Capital Assets" as well as Accounting and Auditing Bulletins on various accounting and auditing topics were produced during the year. This methodology is shared with other legislative auditors in Canada and around the world. Standards and procedures are assessed through post-audit quality review with resulting changes communicated to staff, and auditing research is conducted to develop further ways of improving audits.

18.13 The responsibilities of the Professional Development group include designing, developing and delivering training and development courses for all Office staff in both official languages, and providing assistance in career planning and related counselling services. During the year, the group provided some 2,951 training days internally and 778 training days in courses outside the Office. There were 29 in-house training courses for professional and administrative staff.

18.14 The Control Evaluations group provides professional specialist advice and assistance to comprehensive audit teams. This is done by ensuring that qualified staff are assigned to audits, maintaining an inventory of consultants capable of providing necessary services, providing functional guidance during the audit, and by performing a quality control function. In addition, the group plays a leading role in planning and executing government-wide audits.

18.15 The Computer Audit group provides expertise and methodology in assessing whether value for money has been achieved in expenditures on electronic data processing and in the evaluation of financial controls in computerized systems within the government.



Auditor General Kenneth Dye explains the Office computerized management information system to visiting United Kingdom Comptroller and Auditor General Gordon Downey (left) and Deputy Comptroller and Auditor General Philip Cousins (centre).

Administrative Services

18.16 The Administrative Services Branch provides all central support services throughout the Office. It is responsible for and provides advice on the administration of applicable administrative, contracting, financial, official languages and personnel policies. Its services are offered through five groups.

18.17 The Administration group provides administrative support services including library, mail and messenger, office supplies and equipment, file maintenance, word processing, audio-visual, graphics, accommodation, telecommunications, receptionist and security services.

18.18 The Contract Administration group negotiates all contracts for professionals and monitors their engagement. This activity includes negotiating for the engagement of private sector professionals who are brought into the Office for assignments of up to two years under the Public Service Commission's Interchange Canada program.

18.19 The Comptroller's group is responsible for and provides advice on the financial planning and reporting of the Office's resource requirements, providing EDP services and

systems development, and establishing procedures, systems and controls for managing the financial administrative activities of the Office.

18.20 The Official Languages group advises senior management on interpretation of government official languages policies as they apply to the Office and develops and implements the Office's official languages policies and programs.

18.21 The Personnel group is responsible for developing and administering personnel policies, practices and programs. These include staffing, classification, compensation, pay and benefits, staff relations and human resource planning. From time to time, this group also assists the Office in government-wide audits of payroll costs management.

Executive Office

18.22 The Executive Office is responsible for a number of matters of direct personal concern to the Auditor General. These include reports to Parliament, parliamentary liaison, public affairs, internal communications, strategic planning and legal matters. Also included are relations with international and provincial Auditors General and related institutes and associations in the accounting and management consulting professions. These services are provided through four major groups.

18.23 The Reports group is responsible for editing and producing reports to Parliament and providing reporting guidelines to audit teams and an editorial advisory service for material written for internal and external distribution. The annual Report of the Auditor General to the House of Commons is the principal product of the Office and is subject to central review, edit and technical verification by the Reports group.

18.24 The Parliamentary Liaison group co-ordinates the Office's relations with Parliament and the Public Accounts Committee (PAC) of the House of Commons. This involves preparation for PAC hearings and assistance to Committee members and staff. The group also helps to ensure that reports to Parliament meet the needs of Members to adequately oversee the expenditure of public funds.

18.25 The Public Affairs and Communications Advisory groups are responsible for internal and external communications of the Office. This includes relations with the media, responding to inquiries from the public and producing Office publications.

Advisers to the Auditor General

18.26 The Auditor General has two main groups of outside advisers. Both groups include leading members of the accounting and management consulting professions.

18.27 The Panel of Senior Advisers counsels the Auditor General on the application of comprehensive auditing, with particular emphasis on public sector corporate entities. Members of the Panel are:

- | | |
|---|--|
| ▶ Kenneth G. Belbeck, F.M.C.
President,
Thorne Stevenson & Kellogg | ▶ Kenneth S. Gunning, F.C.A.
Executive Partner,
Thorne Riddell |
| ▶ J.R. Brown, F.C.A.
Senior Partner,
Peat, Marwick, Mitchell & Co. | ▶ Giles R. Meikle, F.C.A.
Senior Partner,
Deloitte Haskins & Sells |
| ▶ H. Marcel Caron, F.C.A.
Executive Partner,
Clarkson Gordon | ▶ Edward W. Netten, C.A.
Managing Partner,
Price Waterhouse Associates |
| ▶ Warren Chippindale, F.C.A.
Chairman and Chief Executive Partner,
Coopers & Lybrand | ▶ Robert M. Rennie, C.A.
Chairman of the Board,
Touche Ross & Co. |
| ▶ Gordon H. Cowperthwaite, F.C.A.
Chairman,
Canadian Comprehensive Auditing
Foundation | |

18.28 The Independent Advisory Committee on Government Accounting and Auditing Standards comprises senior representatives of accounting firms, management consulting firms, and the academic community. The Committee reviews major documents such as the opinion and observations on the annual financial statements of the Government and the Office's *Comprehensive Auditing Manual* and Audit Guides. Members are:

- | | |
|--|---|
| ▶ Kenneth F.Y. Baynton, C.A.
Partner,
Thorne Riddell | ▶ Michael H. Rayner, F.C.A.
Partner,
Price Waterhouse Associates |
| ▶ Alan J. Dilworth, F.C.A.
Managing Partner,
Touche Ross & Co. | ▶ Ronald B. Robinson, F.M.C.
Partner,
Thorne Stevenson & Kellogg |
| ▶ Ronald G. Gage, F.C.A.
Partner
Clarkson Gordon | ▶ Professor L.S. Rosen, F.C.A.
Faculty of Administrative Studies,
York University |
| ▶ Alwyn D. Lloyd, C.A.
Senior Partner,
Lloyd, Courey & Bruneau | ▶ William R. Sloan, F.C.A.
Partner,
Arthur Andersen & Co. |
| ▶ P. Howard Lyons, F.C.A.
Partner,
Deloitte Haskins & Sells | |

Reporting Responsibilities

18.29 Four sections in the Auditor General Act detail our responsibility to report to Parliament.

18.30 Section 6 requires the Auditor General to express an opinion on the financial statements of the Government of Canada. Section 7 requires the Auditor General to report annually to the House of Commons anything that he considers to be of significance and of a nature that should be brought to its attention. This includes cases where public funds have been expended without due regard to economy or efficiency, or where procedures have not been established to measure and report the effectiveness of programs, where such procedures could appropriately and reasonably be implemented. Section 8 enables the Auditor General to make a special report to the House of Commons on any matter of pressing importance or urgency that, in his opinion, should not be deferred until his annual Report is tabled. Finally, Section 11 permits the Auditor General to inquire into and report on matters in response to requests from the Governor in Council. Under this section, the Office continued its examination of the Oil Import Compensation Program, referred to in Chapter 17 of this Report.



The Auditor General and his staff appearing as witnesses before the Public Accounts Committee of the House of Commons.

18.31 The Auditor General is also required to express an opinion, as either the auditor or joint auditor, on the accounts of 34 agency and proprietary Crown corporations, in

accordance with section 77 of the Financial Administration Act, and 50 departmental Crown corporations and other entities, including the accounts of the Governments of the Yukon Territory and Northwest Territories and their agencies. As well, the Auditor General of Canada is the external auditor of the International Civil Aviation Organization (ICAO).

Public Accounts Committee

18.32 The Auditor General and senior members of his staff attend meetings of the Public Accounts Committee as witnesses and give evidence on matters presented in the Auditor General's Report.

Office Resources

18.33 The growing complexity of government operations, the sophistication of modern accounting systems and audit techniques and the changing and expanding responsibilities of the Audit Office require a skilled staff of high quality. The Office attempts to recruit and develop highly qualified people in accounting and auditing as well as a variety of other fields, including engineering, sociology, economics, political science and many other disciplines.

18.34 The Office staff includes 159 members who have the designation of Chartered Accountant (CA), another 35 are Registered Industrial Accountants (RIA) and 57 are Certified General Accountants (CGA).

18.35 The following table presents a profile of the full-time staff of the Office.

	31 March 1983	31 March 1982
Principals	59	55
Directors and Managers	105	92
Supervisors and Auditors	146	126
Other audit staff	68	62
Administrative support staff	<u>158</u>	<u>163</u>
	<u>536</u>	<u>498</u>
National Capital Region	441	418
Other Regions	<u>95</u>	<u>80</u>
	<u>536</u>	<u>498</u>

18.36 To supplement its own staff resources, the Office makes extensive use of professionals from the private sector either on individual service contracts or through the

Public Service Commission's Interchange Canada program. These professionals provide a variety of specialized knowledge and experience not required on a full-time basis. This approach has proven to be cost-effective and benefits both Office staff and the private sector practitioners. At 31 March 1983, the Office had 13 participants associated under Interchange Canada and 245 individuals engaged from the private sector under professional service contracts, representing 89 person-years on an annual basis.

18.37 During the year, the Office continued to use up-to-date techniques and equipment in its auditing and management practices. Computer-assisted auditing is becoming a major element in our audit work. The Office is also actively developing and implementing a variety of office automation techniques such as the use of micro-computers. A network, providing computer graphics, typesetting and word processing intercommunications, was installed to expedite production of our various statements and reports. In addition, to monitor the efficiency of the work of the Office, systems were developed to include all personnel in our computer operated time reporting system.

International Activities

18.38 Canada has acquired a wide reputation in public sector auditing that is recognized by countries and organizations around the world. The work of the Audit Office is also well known and respected by the International Organization of Supreme Audit Institutions (INTOSAI), where the Auditor General serves on the governing board; the United Nations, where Canada is on the Panel of External Auditors; NATO, where we have a representative on the Board of Audit; and the association of Commonwealth Auditors General.

18.39 The Auditor General of Canada is the external auditor of the International Civil Aviation Organization (ICAO), a specialized agency of the United Nations, based in Montreal, that deals with inter-governmental concerns in the field of civil aviation. In addition to expressing his opinion on the financial statements of ICAO, the Auditor General submits an annual report on his work to the ICAO Assembly. The report for the year ended 31 December 1982 emphasized the need to improve electronic data processing capability within the organization and to strengthen the internal audit function. In addition to the audit work carried out in ICAO's headquarters in Montreal, our audit staff worked on assignment for ICAO in Iceland and Denmark.

18.40 Since 1982, the Office has been involved in an international effort to assist the Peoples' Republic of China in developing the legislative audit function called for in its new constitution. Following last year's United Nations-sponsored visit by four senior Chinese officials who reviewed the nature of legislative auditing in Canada, members of our staff have been in contact with Chinese officials to assist them in setting up their own audit structure.

18.41 The Audit Office continues to be involved in international assignments for Canadian auditors. Canadian auditors are working with the Asian Development Bank in

Manila, the NATO Board of Audit in Brussels, and as the Auditor General of Vanuatu. Other arrangements are in the planning stage.

18.42 The international horizons of the Audit Office are further broadened by the International Audit Office Assistance Program. This program is financed by the Canadian International Development Agency and administered by the Canadian Comprehensive Auditing Foundation. The facilities of the Audit Office are used in both the training and fellowship components of the Program. During the year, the Canadian Comprehensive Auditing Foundation, working with our staff, conducted a training course for public sector auditors from English-speaking African nations in Nairobi, Kenya, and for Asian countries in Manila, Philippines. Further courses are planned for French-speaking African nations and for the Arabic-speaking countries. Auditors from Chile, Ghana, Kenya, Malaysia, Peru, the Philippines, St. Lucia, Singapore and Trinidad and Tobago have completed the fellowship component of the Program in the Office of the Auditor General of Canada. Similar one-year assignments in the Audit Office are currently being undertaken by other Fellows from Colombia, Malaysia, Nepal, Sri Lanka, Tanzania and Thailand.



International Fellows Gehendra Adhikary from Nepal and Roberto Angulo from Colombia examine data displayed on Auditor General Kenneth Dye's personal computer terminal.

18.43 During the year, prominent international legislative auditors visited the Office. They included Gordon Downey, Comptroller and Auditor General of the United Kingdom, Charles Bowsher, Comptroller General of the United States, and his predecessor Elmer Staats, E.W. Gregoire, Auditor General of Trinidad and Tobago, and Muhammed Aboud, Controller and Auditor General of Tanzania.

18.44 These international contacts and activities are an important part of the work carried on by the Office of the Auditor General. We look forward to new opportunities where Canada can both learn and contribute knowledge in the area of public sector and legislative auditing around the world.

Official Languages

18.45 The most recent report of the Commissioner of Official Languages expresses this opinion: "In addition to setting standards for good financial behaviour, the Office of the Auditor General of Canada may be on the way to becoming a model of linguistic probity. In 1982 it gave priority to developing more functional bilingualism among its employees and to increasing Francophone participation." While noting "the long-standing problem of under-representation of Francophones in senior positions", the report added: "The Auditor General's priority is to make sure that the current incumbents of bilingual positions are able to function competently in both languages."

18.46 Consistent with the Auditor General's commitment to make the Office functionally bilingual, a broader thrust was given during the year to language training and development activities. A total of 37 employees participated in our in-house language training and development workshops; two completed full-time training, and 16 enrolled in the Public Service Commission's evening courses. The Language Knowledge Examination was administered to 57 employees.

Retirements

18.47 Members of the Audit Office who retired before 31 March 1983, and their period of public service were: Frédéric A. Bélanger, BA, B.Comm., CGA, an Audit Director, 34 years; Stephen J. Maubach, B.Comm., CA, a Senior Auditor, 11 years; and Robert W. Storey, CGA, an Audit Manager, 37 years.

Appropriations and Expenditures

18.48 Exhibit 18.2 presents the appropriations and expenditures of the Office, by activity and by object. Expenditures in 1982-83 rose by \$2,217,000 or 6.9 per cent over 1981-82. The cost of the Office in relation to the federal government's budgetary estimates dropped from .0468 per cent in 1981-82 to .0441 per cent in 1982-83, or less than five cents for every \$100 of government spending as set out in the Government's spending Estimates. It should be noted in this respect that the responsibilities of the Office also include the audit of billions of dollars of non-budgetary expenditures and receipts not included in the Estimates, such as the Unemployment Insurance and Canada Pension Programs, the activities of Crown corporations and government loan and guarantee programs. Estimates for the Office for the 1983-84 fiscal year have been maintained at the level of 1982-83 appropriations, in constant dollars.

**OFFICE OF THE AUDITOR GENERAL OF CANADA
APPROPRIATIONS AND EXPENDITURES**

Appropriations and Expenditures by Activity

	1983-84	1982-83		1981-82	
	<u>Estimates</u>	<u>Appropriations</u>	<u>Expenditures</u>	<u>Appropriations</u>	<u>Expenditures</u>
		(thousands of dollars)			
Government Audits	32,076	29,582	28,178	26,781	26,072
Other Audits	248	135	152	113	102
Administration	6,140	5,832	5,768	5,374	5,707
TOTAL	<u>38,464</u>	<u>35,549</u>	<u>34,098</u>	<u>32,268</u>	<u>31,881</u>

Appropriations and Expenditures by Object

	1983-84	1982-83		1981-82	
	<u>Estimates</u>	<u>Appropriations</u>	<u>Expenditures</u>	<u>Appropriations</u>	<u>Expenditures</u>
		(thousands of dollars)			
Salaries and Wages	23,235	19,749	20,088 ⁽¹⁾	17,536	16,740
Employee Benefit Plans	2,895	2,838	2,838	2,637	2,639
Transportation and Communications	2,400	1,615	2,506 ⁽¹⁾	1,145	1,843
Information	139	95	78	115	83
Professional and Special Services	8,298	9,981	6,648 ⁽¹⁾	9,680	9,036
Rentals	464	332	410	245	390
Purchased Repair and Upkeep	70	22	117	40	118
Utilities, Materials and Supplies	500	525	462	515	389
Construction and Acquisition of Machinery and Equipment	73	67	612	61	340
Grants and Contributions	339	320	318	290	288
All Other Expenditures	51	5	21	4	15
TOTAL	<u>38,464</u>	<u>35,549</u>	<u>34,098</u>	<u>32,268</u>	<u>31,881</u>

⁽¹⁾During 1982-83, the reporting structure for certain objects of expenditures was changed. Travel expenditures for professional contracts and Executive Interchange expenses were charged to Transportation and Communications. Executive Interchange fees were charged to Salaries and Wages. The appropriations for these items remain in Professional and Special Services for 1982-83.

APPENDICES

TABLE OF CONTENTS

APPENDICES

Appendix	Page
A. AUDITOR GENERAL ACT	573
B. FINANCIAL ADMINISTRATION ACT - EXTRACTS FROM PART VIII	581
C. REPORTS OF THE STANDING COMMITTEE ON PUBLIC ACCOUNTS TO THE HOUSE OF COMMONS	
EIGHTEENTH REPORT - March 29, 1983	585
NINETEENTH REPORT - May 30, 1983	587
TWENTIETH REPORT - May 30, 1983	591
D. OPINION AND OBSERVATIONS BY THE AUDITOR GENERAL ON THE FINANCIAL STATEMENTS OF THE GOVERNMENT OF CANADA	595

APPENDIX A

AUDITOR GENERAL ACT

25-26 ELIZABETH II

CHAPTER 34

An Act respecting the office of the Auditor General of Canada and matters related or incidental thereto

[Assented to 14th July, 1977]

Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:

PART I

SHORT TITLE

Short title	1. This Part may be cited as the <i>Auditor General Act</i> .	(3) Once having served as the Auditor General, a person is not eligible for re-appointment to that office.	Re-appointment
	INTERPRETATION	(4) In the event of the absence or incapacity of the Auditor General or if the office of Auditor General is vacant, the Governor in Council may appoint a person temporarily to perform the duties of Auditor General.	Vacancy
Definitions	2. In this Act,		
"Auditor General"	"Auditor General" means the Auditor General of Canada appointed pursuant to subsection 3(1);		
"Crown corporation"	"Crown corporation" has the meaning assigned to that expression by subsection 66(1) of the <i>Financial Administration Act</i> ;	4. (1) The Auditor General shall be paid a salary equal to the salary of a puisne judge of the Supreme Court of Canada.	Salary
"department"	"department" has the meaning assigned to that term by section 2 of the <i>Financial Administration Act</i> ;	(2) The provisions of the <i>Public Service Superannuation Act</i> , other than those relating to tenure of office, apply to the Auditor General except that a person appointed as Auditor General from outside the Public Service may, by notice in writing given to the President of the Treasury Board not more than sixty days after the date of his appointment as Auditor General, elect to participate in the pension plan provided for in the <i>Diplomatic Service (Special) Superannuation Act</i> in which case the provisions of that Act, other than those relating to tenure of office, apply to him and the provisions of the <i>Public Service Superannuation Act</i> do not apply to him.	Pension benefits
"registrar"	"registrar" means the Bank of Canada and a registrar appointed under Part IV of the <i>Financial Administration Act</i> .		
	AUDITOR GENERAL OF CANADA		
Appointment and tenure of office	3. (1) The Governor in Council shall, by commission under the Great Seal, appoint a qualified auditor to be the officer called the Auditor General of Canada to hold office during good behaviour for a term of ten years, but the Auditor General may be removed by the Governor in Council on address of the Senate and House of Commons.		
Idem	(2) Notwithstanding subsection (1), the Auditor General ceases to hold office on attaining the age of sixty-five years.	5. The Auditor General is the auditor of the accounts of Canada, including those relating to the Consolidated Revenue Fund	Examination
		DUTIES	

and as such shall make such examinations and inquiries as he considers necessary to enable him to report as required by this Act.

Idem

6. The Auditor General shall examine the several financial statements required by section 55 of the *Financial Administration Act* to be included in the Public Accounts, and any other statement that the Minister of Finance may present for audit and shall express his opinion as to whether they present fairly information in accordance with stated accounting policies of the federal government and on a basis consistent with that of the preceding year together with any reservations he may have.

Report to House of Commons

7. (1) The Auditor General shall report annually to the House of Commons

- (a) on the work of his office; and
- (b) on whether, in carrying on the work of his office, he received all the information and explanations he required.

Idem

(2) Each report of the Auditor General under subsection (1) shall call attention to anything that he considers to be of significance and of a nature that should be brought to the attention of the House of Commons, including any cases in which he has observed that

(a) accounts have not been faithfully and properly maintained or public money has not been fully accounted for or paid, where so required by law, into the Consolidated Revenue Fund;

(b) essential records have not been maintained or the rules and procedures applied have been insufficient to safeguard and control public property, to secure an effective check on the assessment, collection and proper allocation of the revenue and to ensure that expenditures have been made only as authorized;

(c) money has been expended other than for purposes for which it was appropriated by Parliament;

(d) money has been expended without due regard to economy or efficiency; or

(e) satisfactory procedures have not been established to measure and report the

effectiveness of programs, where such procedures could appropriately and reasonably be implemented.

(3) Each annual report by the Auditor General to the House of Commons shall be submitted to the Speaker of the House of Commons on or before the 31st day of December in the year to which the report relates and the Speaker of the House of Commons shall lay each such report before the House of Commons forthwith after receipt thereof by him or, if that House is not then sitting, on the first day next thereafter that the House of Commons is sitting.

Submission of reports to Speaker and tabling in the House of Commons

8. (1) The Auditor General may make a special report to the House of Commons on any matter of pressing importance or urgency that, in his opinion, should not be deferred until the presentation of his annual report.

Special report

(2) Each special report of the Auditor General to the House of Commons made under subsection (1) or 20(2) shall be submitted to the Speaker of the House of Commons and shall be laid before the House of Commons by the Speaker of the House of Commons forthwith after receipt thereof by him, or if that House is not then sitting, on the first day next thereafter that the House of Commons is sitting.

Submission of report to Speaker and tabling in the House of Commons

9. The Auditor General shall

Idem

(a) make such examination of the accounts and records of each registrar as he deems necessary, and such other examinations of a registrar's transactions as the Minister of Finance may require; and

(b) when and to the extent required by the Minister of Finance, participate in the destruction of any redeemed or cancelled securities or unissued reserves of securities authorized to be destroyed under the *Financial Administration Act*;

and he may, by arrangement with a registrar, maintain custody and control, jointly with that registrar, of cancelled and unissued securities.

10. Whenever it appears to the Auditor General that any public money has been improperly retained by any person, he shall forthwith report the circumstances of the case to the President of the Treasury Board.

Improper retention of public money

Inquiry and
report

11. The Auditor General may, if in his opinion such an assignment does not interfere with his primary responsibilities, whenever the Governor in Council so requests, inquire into and report on any matter relating to the financial affairs of Canada or to public property or inquire into and report on any person or organization that has received financial aid from the Government of Canada or in respect of which financial aid from the Government of Canada is sought.

Advisory
powers

12. The Auditor General may advise appropriate officers and employees in the public service of Canada of matters discovered in his examinations and, in particular, may draw any such matter to the attention of officers and employees engaged in the conduct of the business of the Treasury Board.

ACCESS TO INFORMATION

Access to
information

13. (1) Except as provided by any other Act of Parliament that expressly refers to this subsection, the Auditor General is entitled to free access at all convenient times to information that relates to the fulfilment of his responsibilities and he is also entitled to require and receive from members of the public service of Canada such information, reports and explanations as he deems necessary for that purpose.

Stationing of
officers in
departments

(2) In order to carry out his duties more effectively, the Auditor General may station in any department any person employed in his office, and the department shall provide the necessary office accommodation for any person so stationed.

Oath of secrecy

(3) The Auditor General shall require every person employed in his office who is to examine the accounts of a department or of a Crown corporation pursuant to this Act to comply with any security requirements applicable to, and to take any oath of secrecy required to be taken by, persons employed in that department or Crown corporation.

Inquiries

(4) The Auditor General may examine any person on oath on any matter pertaining to any account subject to audit by him and for the purposes of any such examination the Auditor General may exercise all the powers of a commissioner under Part I of the *Inquiries Act*.

14. (1) Notwithstanding subsections (2) and (3), in order to fulfil his responsibilities as the auditor of the accounts of Canada, the Auditor General may rely on the report of the duly appointed auditor of a Crown corporation or of any subsidiary of a Crown corporation.

Reliance on
audit reports of
Crown
corporations

(2) The Auditor General may request a Crown corporation to obtain and furnish to him such information and explanations from its present or former directors, officers, employees, agents and auditors or those of any of its subsidiaries as are, in his opinion, necessary to enable him to fulfil his responsibilities as the auditor of the accounts of Canada.

Auditor
General may
request
information

(3) If, in the opinion of the Auditor General, a Crown corporation, in response to a request made under subsection (2), fails to provide any or sufficient information or explanations, he may so advise the Governor in Council, who may thereupon direct the officers of the corporation to furnish the Auditor General with such information and explanations and to give him access to those records, documents, books, accounts and vouchers of the corporation or any of its subsidiaries access to which is, in the opinion of the Auditor General, necessary for him to fulfil his responsibilities as the auditor of the accounts of Canada.

Direction of the
Governor in
Council

STAFF OF THE AUDITOR GENERAL

15. (1) Such officers and employees as are necessary to enable the Auditor General to perform his duties shall be appointed in accordance with the *Public Service Employment Act*.

Officers, etc.

(2) Subject to any other Act of Parliament or regulations made thereunder, but without the approval of the Treasury Board, the Auditor General may, within the total dollar limitations established for his office in

Contract for
professional
services

Appropriation Acts, contract for professional services.

(3) The Auditor General may exercise and perform, in such manner and subject to such terms and conditions as the Public Service Commission directs, the powers, duties and functions of the Public Service Commission under the *Public Service Employment Act*,

Delegation to
Auditor
General

other than the powers, duties and functions of the Commission in relation to appeals under sections 21 and 31 of that Act and inquiries under section 32 of that Act.

Suspension

(4) The Auditor General may suspend from the performance of his duty any person employed in his office.

Responsibility
for personnel
management

16. In respect of persons employed in his office, the Auditor General is authorized to exercise the powers and perform the duties and functions of the Treasury Board under the *Financial Administration Act* that relate to personnel management including the determination of terms and conditions of employment and the responsibility for employer and employee relations, within the meaning of paragraph 5(1)(e) and section 7 of that Act.

Collective
agreements

17. Any collective agreement affecting persons employed in the office of the Auditor General entered into before the coming into force of this Act remains in force and binds the Auditor General as employer of such persons until the expiry of that agreement.

Classification
standards

18. Classification standards may be prepared for persons employed in the office of the Auditor General to conform with the classifications that the Auditor General recognizes for the purposes of that office.

Delegation

19. The Auditor General may designate a senior member of his staff to sign on his behalf any opinion that he is required to give and any report, other than his annual report on the financial statements of Canada made pursuant to section 55 of the *Financial Administration Act* and his reports to the House of Commons under this Act and any member so signing an opinion or report shall indicate beneath his signature his position in the office of the Auditor General and the fact that he is signing on behalf of the Auditor General.

ESTIMATES

20. (1) The Auditor General shall annually prepare an estimate of the sums that will be required to be provided by Parliament for the payment of the salaries, allowances and expenses of his office during the next ensuing fiscal year.

Estimates

(2) The Auditor General may make a special report to the House of Commons in the event that amounts provided for his office in the estimates submitted to Parliament are, in his opinion, inadequate to enable him to fulfil the responsibilities of his office.

Special reports

21. The provisions of the *Financial Administration Act* with respect to the division of appropriations into allotments do not apply in respect of appropriations for the office of the Auditor General.

Appropriations
allotments

AUDIT OF THE OFFICE OF THE AUDITOR GENERAL

22. (1) A qualified auditor nominated by the Treasury Board shall examine the receipts and disbursements of the office of the Auditor General and shall report annually the outcome of his examinations to the House of Commons.

Audit of office
of the Auditor
General

(2) Each report referred to in subsection (1) shall be submitted to the President of the Treasury Board on or before the 31st day of December in the year to which the report relates and the President of the Treasury Board shall lay each such report before the House of Commons within fifteen days after receipt thereof by him or, if that House is not then sitting, on any of the first fifteen days next thereafter that the House of Commons is sitting.

Submission of
reports and
tabling

PART II

CONSEQUENTIAL AND RELATED
AMENDMENTS

R.S., c. F-10	23. Part VII of the <i>Financial Administration Act</i> is repealed.	"(5) The Auditor General has, in connection with his examination of the accounts of the Territories, all the powers that he has under the <i>Auditor General Act</i> in connection with the examination of the accounts of Canada."	Powers of Auditor General
R.S., c. P-35	24. (1) Part I of Schedule I to the <i>Public Service Staff Relations Act</i> is amended by deleting therefrom the words "Office of the Auditor General of Canada". (2) Part II of Schedule I to the <i>Public Service Staff Relations Act</i> is amended by adding thereto the words "Office of the Auditor General of Canada".	28. Subsection 26(5) of the <i>Yukon Act</i> , is repealed and the following substituted therefor: "(5) The Auditor General has, in connection with his examination of the accounts of the Territory, all the powers that he has under the <i>Auditor General Act</i> in connection with the examination of the accounts of Canada."	R.S., c. Y-2 Powers of Auditor General
R.S., c. E-8	25. Section 16 of the <i>Established Programs (Interim Arrangements) Act</i> is repealed and the following substituted therefor: "16. Nothing in this Act shall be construed to restrict the powers of the Auditor General of Canada under the <i>Auditor General Act</i> ."	29. Section 15 of the French version of the <i>Unemployment Insurance Act</i> , 1971 is repealed and the following substituted therefor: "15. Le vérificateur général vérifie chaque année la comptabilité et les opérations financières de la Commission et en fait rapport au Ministre."	1970-71-72, c. 48 Vérification
1970-71-72, c. 52	26. Section 27 of the French version of the <i>Pilotage Act</i> is repealed and the following substituted therefor: "27. Le vérificateur général vérifie chaque année la comptabilité et les opérations financières de chaque Administration et en fait rapport au Ministre."	30. Whenever, in the French version, the expression "auditeur général" appears in any provision of an Act listed in the schedule to this Act, there shall in every case, unless the context otherwise requires, be substituted the expression "vérificateur général".	Amendments to French version
Vérificateur général			
R.S., c. N-22	27. Subsection 23(5) of the <i>Northwest Territories Act</i> is repealed and the following substituted therefor:		

PART III

COMMENCEMENT

Coming into force
31. This Act shall come into force on a day to be fixed by proclamation.

(The Act came into force 1 August 1977)

APPENDIX B

FINANCIAL ADMINISTRATION ACT -

EXTRACTS FROM PART VIII

FINANCIAL ADMINISTRATION ACT

R.S., c. F-10

Extracts from Part VIII

CROWN CORPORATIONS

Access to books,
etc.

76. The auditor is entitled to have access at all convenient times to all records, documents, books, accounts and vouchers of a corporation, and is entitled to require from the directors and officers of the corporation such information and explanations as he deems necessary. R.S., c. 116, s. 86.

Auditor's report

77. (1) The auditor shall report annually to the appropriate Minister the result of his examination of the accounts and financial statements of a corporation, and the report shall state whether in his opinion

(a) proper books of account have been kept by the corporation;

(b) the financial statements of the corporation

(i) were prepared on a basis consistent with that of the preceding year and are in agreement with the books of account,

(ii) in the case of the balance sheet, give a true and fair view of the state of the corporation's affairs as at the end of the financial year, and

(iii) in the case of the statement of income and expense, give a true and fair view of the income and expense of the corporation for the financial year; and

(c) the transactions of the corporation that have come under his notice have been within the powers of the corporation under this Act and any other Act applicable to the corporation;

and the auditor shall call attention to any other matter falling within the scope of his examination that in his opinion should be brought to the attention of Parliament.

Other reports

(2) The auditor shall from time to time make to the corporation or to the appropriate Minister such other reports as he may deem necessary or as the appropriate Minister may require.

Annual report

(3) The annual report of the auditor shall be included in the annual report of the corporation.

Audit

(4) Notwithstanding section 68, this section operates in lieu of section 132 of the *Canada Corporations Act* or sections 159 to 161 of the *Canada Business Corporations Act*, as the case may be.

Report through
Minister

78. In any case where the auditor is of the opinion that any matter in respect of a corporation should be brought to the attention of the Governor in Council, the Treasury Board or the Minister of Finance, such report shall be made forthwith through the appropriate Minister. R.S., c. 116, s. 88.

APPENDIX C

REPORTS OF THE STANDING COMMITTEE ON PUBLIC ACCOUNTS TO THE HOUSE OF COMMONS

	Page
EIGHTEENTH REPORT - March 29, 1983	585
(Canadian Dairy Commission)	
NINETEENTH REPORT - May 30, 1983	587
(Accountability of Crown-owned Corporations)	
TWENTIETH REPORT - May 30, 1983	591
(Canada Post Corporation)	

EIGHTEENTH REPORT OF THE STANDING COMMITTEE ON PUBLIC ACCOUNTS TO THE HOUSE OF COMMONS, MARCH 29, 1983

REPORT TO THE HOUSE

Tuesday, March 29, 1983

The Standing Committee on Public Accounts has the honour to present its

EIGHTEENTH REPORT

1. In accordance with its permanent Order of Reference contained in the Standing Orders of the House of Commons, your Committee has considered the Report of the Auditor General of Canada to the Minister of Agriculture on the Comprehensive Audit of the Canadian Dairy Commission (CDC), which was tabled in the House of Commons on July 16, 1982.

2. The co-operation of the witnesses who appeared before your Committee is acknowledged and appreciated.

3. Your Committee noted the observations and recommendations contained in the Comprehensive Audit Report of the Auditor General on the Canadian Dairy Commission. Your Committee was pleased to find that the Minister of Agriculture has instructed the CDC to conform with each of the recommendations and to report back to him on their completion and implementation.

4. In its Second Report to the House, dated April 11, 1978, your Committee concluded that the CDC was deficient in the areas of financial planning, reporting and managerial control and recommended several measures to strengthen the financial management, control and accountability of the CDC to Parliament. Your Committee has not yet seen any satisfactory response to its recommendations in this regard from the CDC.

5. Your Committee observes that the Government, in Bill C-85 (Canagrex), proposed improved financial management, control and accountability of Crown corporations. Such proposals call for proper books of account, an annual audit, submissions to the Minister, the President of the Treasury Board and Cabinet for approval of corporate plans, operating and capital budgets, and the tabling of an annual report to Parliament. Your Committee concludes that such provisions need to be included in the Canadian Dairy Commission Act in order to hold the CDC more accountable to the Minister of Agriculture and Parliament.

6. Your Committee therefore recommends:

(a) that the Government give consideration to the advisability of amending the Canadian Dairy Commission Act to provide for improved financial management, control and accountability of the CDC to Parliament; and report back to the House in accordance with Standing Order 69(13);

(b) that the Minister of Agriculture provide the Public Accounts Committee before June 30, 1983 with a progress report on the implementation of the 36 recommendations contained in the Auditor General's Comprehensive Audit Report of the CDC; and a timetable to indicate when each recommendation will be implemented; and

(c) that the Minister of Agriculture request the Auditor General undertake a follow-up audit in the CDC and report back on the progress on the implementation of the recommendations of the Comprehensive Audit Report in his Annual Report of 1984.

7. A copy of the relevant Minutes of Proceedings and Evidence (*Issues Nos. 63, 64, 65 and 75 of the First Session of the Thirty-second Parliament*) is tabled.

Respectfully submitted,

BILL CLARKE

Chairman

NINETEENTH REPORT OF THE STANDING COMMITTEE ON PUBLIC ACCOUNTS TO THE HOUSE OF COMMONS, MAY 30, 1983

REPORT TO THE HOUSE

Monday, May 30, 1983

The Standing Committee on Public Accounts has the honour to present its

NINETEENTH REPORT

1. In accordance with its permanent Order of Reference contained in the Standing Orders of the House of Commons, your Committee has considered the Report of the Auditor General to the House of Commons for the fiscal year ended March 31, 1982 and, in particular, Chapter 2 on the Accountability of Crown-owned Corporations.

2. The co-operation of the Honourable Herb Gray, President of the Treasury Board, and the other witnesses who appeared before your Committee is acknowledged and appreciated.

3. In this Report your Committee wishes to direct its comments to all corporations that are controlled by the Government and will therefore use the phrase "government-controlled corporation" to refer to corporations which are either wholly-owned by the Government or controlled by the Government through partial ownership. In adopting this usage, your Committee notes that the Auditor General used the phrase "Crown-owned corporation" to indicate that the scope of his review of Crown corporations was limited to wholly-owned corporations.

Previous Reports

4. Your Committee's Report on Polysar, dated July 7, 1977, was the first of five major reports to the House on the subject of the accountability of government-controlled corporations. The recommendations made in these reports remain valid and address many of the issues raised by the Auditor General's accountability framework for Crown corporations. The recommendations of your Committee's past reports form the basis for this report and, accordingly, the following paragraphs summarize these recommendations.

5. The Polysar Report dealt with the topics of directing, reporting and audit that the Auditor General identified in his general accountability framework. In that report, your Committee recommended that:

—the Government monitor compliance with its policy guidelines on corporations' commercial practices, penalize non-compliance, and report to Parliament;

—the Government issue guidelines on the operations and objectives of foreign subsidiaries to ensure parliamentary scrutiny;

—Ministers be represented on boards of directors and audit committees;

—audit committees meet standards regarding their establishment, composition, meetings, and attendance of the Auditor General;

—standards of conduct of business practices be established and complied with;

—auditors adopt consistent standards of reporting to Ministers and Parliament;

—auditors furnish the Auditor General with reports, financial statements, and other information he needs, and consult regularly with him;

—the Auditor General have access to corporation records and the right to conduct investigations; and

—the Auditor General develop a manual for auditors' reporting.

6. The Atomic Energy of Canada Limited (AECL) Report, dated February 27, 1978, addressed the Auditor General's accountability themes of authorization, mandate, and directing. Your Committee recommended that:

—there be mandatory parliamentary review of Crown corporations' objectives when corporations significantly change their activities;

—the Government ensure the following: enunciation of boards of directors' responsibilities and duties; qualifications of senior management; approval of contracts with significant financial risk; a code of business ethics; and central agency monitoring of financial practices; and

—boards of directors ensure the following: better definition of senior management job requirements; limits on delegation of authority to officers; quality standards on information from management; duties of financial officers in contracts or payment processes clearly defined; decisions clearly recorded in minutes; and codes of business ethics better defined than the Government's 1976 guidelines.

7. The Crown Corporations Report, dated April 12, 1978, dealt with all the issues raised by the Auditor General's accountability framework, viz. authorization, mandate, financing, directing, controlling, reporting, and audit. In that report, your Committee recommended that:

—the Financial Administration Act be amended as follows: an appropriate definition of "government-controlled corporation"; scheduling of all government-controlled corporations based on criteria of degree of dependence on public funds, the nature of the operations and the degree of public ownership; annual review of this scheduling; orderly, public addition to or deletion from schedules; provision to Parliament of a current listing and other pertinent information for all government-controlled corporations; and

—the following provisions govern corporations dependent on government financial support or providing services not likely to be undertaken by the private sector: approval of loans and equity investments only when these can be repaid out of earned income; adequate, integrated information on spending plans be provided to Parliament and Government; improved Public Accounts reporting based on Generally Accepted Accounting Principles; auditors' mandates, where appropriate, to include auditing of economy, efficiency and effectiveness; Comptroller General to set guidelines for acceptable standards of financial management; and immediate Treasury Board action to remedy existing deficiencies.

8. The Fourth Report of your Committee, dated February 20, 1981, was concerned with the issue of comprehensive audit of Crown corporations and recommended that:

—the Government, in legislation, authorize comprehensive audit by the Auditor General in wholly-owned corporations; and

—the comprehensive audit be based on a preliminary survey and concurred in by the board of directors.

9. The Fifteenth Report, the most recent of your Committee's reports on the accountability of Crown corporations, dated May 26, 1982, dealt with the Auditor General's issues of authorization, mandate, financing, and reporting. This report recommended Crown corporation legislation to enable the following: setting objectives for government-controlled corporations; improving Government's and Parliament's monitoring and controlling of corporations' use of public funds; and establishing a new ministry to oversee and report to Parliament on all Crown corporations.

10. As is amply demonstrated by the reports outlined above, your Committee has repeatedly recommended that the Government improve the accountability to Parliament of the corporations it controls. These recommendations have not been implemented. Where your Committee has recommended immediate action by a Government central agency (e.g. Treasury Board, in the 1978 Crown Corporations Report), the response has been: "awaiting Crown corporation legislation." To date, no such legislation has been passed. Your Committee must therefore conclude that the Government's accountability regime for the corporations it controls remains seriously deficient.

Recommendations

11. (a) Your Committee recommends that the Government create a Ministry for Government-Controlled Corporations, which would eliminate the need for the Crown Corporations Division of Treasury Board Secretariat.

(b) Your Committee further recommends that this Ministry take the following action:

- (i) recognize government-controlled corporations as instruments of public policy, with statements of objectives in legislation, communicate government priorities and directives clearly to them, and table these priorities and directives in Parliament on a timely basis;
- (ii) table in Parliament any statutory instrument which creates or approves acquisition or disposal of any government-controlled corporation and subject it to debate;
- (iii) classify all government-controlled corporations according to clear criteria, schedule them in the Financial Administration Act, and regularly review these classifications;
- (iv) monitor and control the appointment, dismissal, compensation, duties and responsibilities of government-controlled corporations' directors and senior officers (including conflict of interest rules and corporate by-laws);

- (v) control government-controlled corporations' spending, commitment, and borrowing where public funding is involved, and set standards for the approval of capital and operating budgets, corporate plans, external borrowing, guarantees, and compensation for activities on behalf of the Government;
 - (vi) require government-controlled corporations that receive public funding to submit an annual report to relate specific payments of public monies to results achieved. This report should be added to the corporation's audited financial statements and be published in the Public Accounts;
 - (vii) ensure that reports, returns and other documents required to be tabled in Parliament by statute or regulation are tabled on time;
 - (viii) provide Parliament annually with a summary of the corporate plan of each government-controlled corporation; and
 - (ix) implement a program of comprehensive auditing in all government-controlled corporations.
12. Your committee requests that the Government respond to the foregoing recommendations in accordance with Standing Order 69 (13).
13. A copy of the relevant Minutes of Proceedings and Evidence (*Issues Nos. 67, 68, 82 and 83 of the First Session of the Thirty-second Parliament*) is tabled.

Respectfully submitted,

BILL CLARKE,

Chairman.

TWENTIETH REPORT OF THE STANDING COMMITTEE ON PUBLIC ACCOUNTS TO THE HOUSE OF COMMONS, MAY 30, 1983

REPORT TO THE HOUSE

Monday, May 30, 1983

The Standing Committee on Public Accounts has the honour to present its

TWENTIETH REPORT

1. In accordance with its permanent Order of Reference contained in the Standing Orders of the House of Commons, your Committee has considered the Report of the Auditor General of Canada for the fiscal year ended March 31, 1982 and, in particular, Chapter 2—Accountability of Crown-owned Corporations insofar as the Canada Post Corporation (CPC) is concerned. Further, your Committee reviewed the responses of the CPC to the Committee's Sixteenth Report, dated June 23, 1982.

2. The co-operation of the witnesses who appeared before your Committee is acknowledged and appreciated.

3. Your Committee heard testimony regarding the Corporation's response to an improved accountability framework. Your Committee was pleased to note that the Canada Post Corporation Act has addressed many of the concerns raised by the Auditor General in his 1982 and earlier reports and by this Committee with respect to the accountability of government-controlled corporations to Parliament. Officials of the Corporation responded favourably to each of the areas of concern: mandate, authorization, reporting, financing, directing, controlling, and auditing of Crown corporations. In particular, your Committee was most interested in those reporting provisions in the Act that permit Parliament and the Canadian public to be informed, on a formal and regular basis, of major changes in the Corporation's policies, regulations and operations. Your Committee would like to see similar provisions in new legislation for government-controlled corporations.

4. The President of the CPC presented a report to your Committee on the performance of the Corporation in 1982 with respect to its objectives for the quality of service, labour relations, and financial self-sufficiency. Your Committee is satisfied that progress is being made by the Corporation in each of these areas, although much has yet to be done before its corporate objectives are met. Members were particularly

interested in the Corporation's actions to reduce its deficit and move towards its goal of financial self-sufficiency. Your Committee will continue to monitor the Corporation's progress in these areas.

5. Your Committee is concerned that the Corporation has not tabled its annual report for the fiscal year ended March 31, 1982 thus contravening its new legislation. Furthermore, the CPC is certain to miss its next legislative deadline of June 30, 1983. As well, the Corporation's capital budgets for fiscal years 1982-83 and 1983-84 have not yet been tabled. Because these unusual delays are caused by a number of key financial questions that have yet to be resolved between the Government and the Corporation, your Committee strongly urges that a much higher priority be placed on the resolution of these issues. Until this is done, neither Parliament nor the shareholder or the Canadian public will be able to evaluate the financial performance of the CPC.

6. Your Committee was pleased to note a willingness on the part of the Corporation's officials to permit the Auditor General to conduct a follow-up to his 1980-81 comprehensive audit of the former Post Office Department some time in 1984; and that there is agreement in principle by the Corporation to a future comprehensive audit. Your Committee re-emphasizes its earlier recommendation, in its Sixteenth Report to the House, for the Government to retain the services of the Auditor General as a joint auditor of the Corporation at least until such time as the Corporation achieves financial self-sufficiency.

7. Your Committee recommends that:

(a) the Government and the Corporation take immediate steps to resolve the major financial questions that relate to the change-over from the Post Office Department to the new Corporation;

(b) the Corporation finalize and present to the Minister as soon as possible the 1982 and 1983 financial statements; and

(c) the Corporation report back to your Committee by December 31, 1983 on the progress relative to the 18 performance indicators, labour relations and financial self-sufficiency.

8. Your Committee requests that the Government respond to recommendation 7(a) above in accordance with Standing Order 69(13).

9. A copy of the relevant Minutes of Proceedings and Evidence (*Issues Nos. 73, 74, 82 and 83 of the First Session of the Thirty-second Parliament*) is tabled.

Respectfully submitted,

BILL CLARKE,

Chairman,

APPENDIX D

OPINION AND OBSERVATIONS BY THE AUDITOR GENERAL ON THE FINANCIAL STATEMENTS OF THE GOVERNMENT OF CANADA

(Sections 2 and 3 of the Public Accounts, 1982-83)

SECTION 2

**1982-83
PUBLIC ACCOUNTS**

Audited Financial Statements of the Government of Canada

CONTENTS

Preface to the audited financial statements of the Government
of Canada
Statement of transactions
Statement of revenue and expenditure
Statement of assets and liabilities
Statement of use of appropriations
Notes to the financial statements of the Government of Canada
Opinion of the Auditor General on the financial statements of
the Government of Canada

PREFACE TO THE AUDITED FINANCIAL STATEMENTS OF THE GOVERNMENT OF CANADA

The accounting policies adopted by the Government and summarized in Note 1 to the financial statements, are the result of continuing developments over the years, and form the basis for the preparation of the financial statements, designed primarily to provide an accounting of the financial resources appropriated by Parliament. The fundamental requirement to report compliance with legislative authority results in the presentation of financial information in a manner significantly different from that found in the private sector. The accrual basis of accounting used in the private sector best reflects the costs incurred to earn revenues; the policies followed by the Government, under which revenue is on the cash basis and expenditure (use of appropriations) is generally on the accrual basis, best accommodate reporting to Parliament.

The four financial statements in this section, together with the accompanying notes, are presented for audit in compliance with Section 55 of the Financial Administration Act. These statements form the basis of the Government's accounting for the management of the financial authorities granted by Parliament. Other sections in this volume, together with Volumes II and III of the Public Accounts, are designed to provide information supporting the financial statements.

The first financial statement is the Statement of Transactions, which summarizes all transactions of the Government, as defined in Note 1 (ii), and shows how the financial requirements were met, and the effect of all transactions on the cash balance. The financial transactions are classified into four main categories: budgetary, non-budgetary, foreign exchange, and unmatured debt.

The first category, budgetary transactions, consists of all the transactions which enter into the calculation of the annual deficit or surplus of the Government, that is the receipts from tax and non-tax revenue together with the expenditures authorized by Parliament. Revenue is recognized only when received and does not include amounts due but not collected. Budgetary expenditure, however, is recorded generally on the accrual basis. Expenditure includes charges for work performed, goods received, services rendered, transfer payments made, amortization of the actuarial deficiencies of the three main superannuation accounts, a provision for estimated losses on realization of recorded assets, and accruals for interest on unmatured debt. Fixed assets, which include land, buildings, works and equipment, are not capitalized but are charged to budgetary expenditure at the time of acquisition or construction. Budgetary expenditure does not include amounts payable or accrued at the year end, for items to be paid from statutory authorities on which Parliament has not imposed annual ceilings, employee termination benefits, unpaid annual vacation entitlements, and the indexing of pensions.

The second category, non-budgetary transactions, consists of loans, investments and advances made by the Government, the Government's liability to outside parties from its role of administrator of certain public moneys received or collected for special purposes, and other liabilities recorded as a result of the budgetary accruals mentioned above. These transactions account for the change in the financial claims due to or financial obligations owing by the Government, in accordance with the accounting policies referred to in Note 1 to the financial statements.

The third category, foreign exchange transactions, reflects transactions with the Exchange Fund Account, the principal objective of which is to aid in the control and protection of the external value of the Canadian dollar, together with an accounting of the net position of the Government with respect to the International Monetary Fund. Foreign exchange transactions also include unmatured debt payable in foreign currencies.

The fourth category, unmatured debt transactions, represents the extent to which financial requirements have been met through the increase in unmatured debt, that is the net changes in the amounts owing for such debt instruments as marketable bonds, Canada savings bonds and Treasury bills. Unmatured debt transactions exclude unmatured debt payable in foreign currencies.

The second statement is the Statement of Revenue and Expenditure. This statement gives a more detailed accounting of the budgetary transactions summarized in the Statement of Transactions. The annual deficit or surplus represents the difference between the expenditures and the revenues of the year, in accordance with the accounting policies previously summarized.

The third statement is the Statement of Assets and Liabilities. Since this statement is based on the Government's accounting policies, it does not parallel the conventional balance sheet presented in the private sector. More particularly, fixed assets having been accounted for as expenditures, are recorded at the nominal value of \$1, and revenues not yet received, such as uncollected taxes, are not recorded as assets. The effect of inflation on the economic value of the Government's reported assets and liabilities has not been reflected. It is generally recognized that inflation tends to reduce the value of financial assets and liabilities while at the same time increasing the recorded value of fixed assets. Thus it should be noted that the difference between the net recorded assets and liabilities is simply the aggregate of annual budgetary deficits and surpluses determined in accordance with the accounting policies of the Government; in no way does this difference reflect the Government's net worth.

The fourth statement is the Statement of Use of Appropriations, which summarizes, by department, the use, during the year, of parliamentary appropriations for budgetary expenditure, and loans, investments and advances.

These four financial statements, when read in conjunction with the notes thereto, present fairly, in the opinion of the Government, the revenue, expenditure, assets and liabilities of the Government of Canada. Fair presentation is achieved through the consistent application of the significant accounting policies, which are summarized in Note 1 to the financial statements.

GOVERNMENT OF CANADA

Statement of Transactions
for the Year Ended March 31, 1983
(in millions of dollars)

	1983	1982
BUDGETARY TRANSACTIONS		
Revenue	55,123	54,068
Expenditure	- 79,776	- 67,674
Deficit	- 24,653	- 13,606
NON-BUDGETARY TRANSACTIONS		
Loans, investments and advances	- 21	- 1,239
Specified purpose accounts	- 220	4,345
Other transactions	1,638	2,169
Net source	1,397	5,275
Financial requirements (excluding foreign exchange)	- 23,256	- 8,331
FOREIGN EXCHANGE TRANSACTIONS⁽²⁾	- 1,177	- 347
Total financial requirements ⁽¹⁾	- 24,433	- 8,678
UNMATURED DEBT TRANSACTIONS⁽²⁾	22,392	9,367
Change in cash	- 2,041	689
CASH BALANCE AT END OF YEAR	4,579	6,620

The accompanying notes are an integral part of this statement.

Details can be found in other sections of this volume.

⁽¹⁾ Cash requirements (-).

⁽²⁾ Unmatured debt payable in foreign currencies has been included as part of foreign exchange transactions.

September 15, 1983.

MARSHALL A. COHEN,
Deputy Minister of Finance.

PIERRE P. SICARD,
Deputy Receiver General for Canada.

GOVERNMENT OF CANADA

Statement of Revenue and Expenditure
for the Year Ended March 31, 1983

(in millions of dollars)

	1983			1982		
	Gross revenue	Revenue credited to appropriations	Net revenue	Gross revenue	Revenue credited to appropriations	Net revenue
REVENUE						
<i>TAX REVENUE</i>						
Income tax—						
Personal	26,330		26,330	24,046		24,046
Corporation	7,139		7,139	8,118		8,118
Non-resident	998		998	1,018		1,018
	34,467		34,467	33,182		33,182
Excise taxes and duties—						
Sales tax	5,894		5,894	6,185		6,185
Customs import duties	2,831		2,831	3,439		3,439
Excise duties	1,274		1,274	1,175		1,175
Other	883	198	685	752	188	564
	10,882	198	10,684	11,551	188	11,363
Energy taxes—						
Petroleum and gas revenue tax and incremental oil revenue tax	1,960		1,960	864		864
Natural gas and gas liquids tax	1,264		1,264	998		998
Excise tax—Gasoline	408		408	436		436
Oil export charges	392		392	519		519
Petroleum compensation charge	3,031	3,031		3,792	3,792	
Special petroleum compensation charge				473		473
	7,055	3,031	4,024	7,082	3,792	3,290
	17,937	3,229	14,708	18,633	3,980	14,653
Other tax revenue	132		132	120		120
TOTAL TAX REVENUE	52,536	3,229	49,307	51,935	3,980	47,955
<i>NON-TAX REVENUE</i>						
Return on investments—						
Bank of Canada	1,879		1,879	1,853		1,853
Canada Mortgage and Housing Corporation	892		892	873		873
Exchange Fund Account	812		812	763		763
Interest on bank deposits	433		433	701		701
Farm Credit Corporation	346		346	285		285
Other return on investments	721	66	655	668	53	615
	5,083	66	5,017	5,143	53	5,090
Refunds of previous years' expenditure	186		186	153		153
Services and service fees	1,772	1,632	140	1,489	1,366	123
Privileges, licences and permits	249	128	121	246	126	120
Proceeds from sales	337	255	82	301	234	67
Bullion and coinage	54		54	70		70
Premium and discount on exchange	11	(1)	11	(1)	(1)	(1)
Other non-tax revenue	1,663	1,458	205	1,713	1,223	490
	4,272	3,473	799	3,972	2,949	1,023
TOTAL NON-TAX REVENUE	9,355	3,539	5,816	9,115	3,002	6,113
TOTAL REVENUE	61,891	6,768	55,123	61,050	6,982	54,068

	1983			1982		
	Gross expen- diture	Revenue credited to appropriations	Net expen- diture	Gross expen- diture	Revenue credited to appropriations	Net expen- diture
EXPENDITURE						
Agriculture	1,020	10	1,010	1,152	10	1,142
Communications	1,721	145	1,576	1,229	95	1,134
Consumer and Corporate Affairs	457		457 ⁽²⁾	790		790 ⁽²⁾
Economic Development	18		18	13		13
Employment and Immigration	4,320	790	3,530	2,877	668	2,209
Energy, Mines and Resources	6,112	3,064	3,048	5,195	3,797	1,398
Environment	841	24	817	700	22	678
External Affairs	1,667	15	1,652	1,452	13	1,439
Finance	22,496	7	22,489	19,830	6	19,824
Fisheries and Oceans	486	3	483	443	2	441
Governor General	4		4	4		4
Indian Affairs and Northern Development	1,681		1,681	1,507		1,507
Industry, Trade and Commerce	1,207		1,207	812		812
Justice	217		217	200		200
Labour	101	19	82	82	11	71
National Defence	7,296	304	6,992	6,331	303	6,028
National Health and Welfare	19,614	33	19,581	17,898	30	17,868
National Revenue	954	54	900	868	52	816
Parliament	167		167	151		151
Privy Council	72		72	64		64
Public Works	3,204	535	2,669	2,516	324	2,192
Regional Economic Expansion	545		545	661		661
Science and Technology	608	12	596	496	10	486
Secretary of State	2,225	11	2,214	2,225	11	2,214
Social Development	131		131	4		4
Solicitor General	1,668	349	1,319	1,503	319	1,184
Supply and Services	1,137	738	399	1,084	690	394
Transport	3,545	637	2,908	2,895	603	2,292
Treasury Board	247	18	229	334	16	318
Veterans Affairs	1,283		1,283	1,140		1,140
TOTAL DEPARTMENTAL EXPENDITURE	85,044	6,768	78,276	74,456	6,982	67,474
PROVISION FOR VALUATION			1,500			200
TOTAL EXPENDITURE			79,776			67,674
TOTAL REVENUE			55,123			54,068
DEFICIT			24,653			13,606

The accompanying notes are an integral part of this statement.

Details of revenue and expenditure can be found in Sections 5 and 6 of this volume and in Volume II.

⁽¹⁾ Less than \$500,000.

⁽²⁾ Includes the net expenditure for the Canada Post Corporation.

September 15, 1983.

MARSHALL A. COHEN,
Deputy Minister of Finance.

PIERRE P. SICARD,
Deputy Receiver General for Canada.

GOVERNMENT OF CANADA

Statement of Assets and Liabilities

as at March 31, 1983

(in millions of dollars)

	1983	1982	Net increase or decrease (-)
ASSETS			
<i>LOANS, INVESTMENTS AND ADVANCES, Table 7.1, Section 7—</i>			
Crown corporations and agencies—			
Lending institutions—			
Canada Deposit Insurance Corporation	140	200	- 60
Canada Mortgage and Housing Corporation	10,418	10,388	30
Export Development Corporation	924	884	40
Farm Credit Corporation	4,121	3,727	394
Federal Business Development Bank	886	1,031	- 145
	16,489	16,230	259
All other Crown corporations and agencies—			
Air Canada	592	608	- 16
Atomic Energy of Canada Limited	870	873	- 3
Canada Development Investment Corporation	396		396
Canadian National Railways	2,794	2,753	41
Petro-Canada	2,030	1,573	457
Other	1,693	1,794	- 101
	8,375	7,601	774
Total Crown corporations and agencies	24,864	23,831	1,033
Other loans, investments and advances—			
Provincial and territorial governments	1,249	1,208	41
National governments including developing countries, Table 7.7, Section 7	4,048	3,775	273
International organizations	2,917	2,585	332
Less: notes payable	1,099	980	119
	1,818	1,605	213
Veterans' Land Act Fund advances less allowance for conditional benefits	255	283	- 28
Government controlled corporations	400	488	- 88
Private sector enterprises	322	266	56
Miscellaneous	288	267	21
	8,380	7,892	488
	33,244	31,723	1,521
Less: allowance for valuation	4,000	2,500	1,500
TOTAL LOANS, INVESTMENTS AND ADVANCES	29,244	29,223	21
<i>FOREIGN EXCHANGE ACCOUNTS, Table 10.1, Section 10—</i>			
Exchange Fund Account—Advances, Table 10.2, Section 10	4,166	2,176	1,990
International Monetary Fund—Subscriptions	2,716	2,780	- 64
	6,882	4,956	1,926
Less: International Monetary Fund—Notes payable	2,283	2,327	- 44
Special Drawing Rights	1,040	1,064	- 24
	3,323	3,391	- 68
TOTAL FOREIGN EXCHANGE ACCOUNTS	3,559	1,565	1,994
CASH IN TRANSIT, Table 12.1, Section 12	2,566	1,830	736
CASH, Table 12.2, Section 12	4,579	6,620	- 2,041
FIXED ASSETS (valued at one dollar), Section 12			
NET RECORDED ASSETS	39,948	39,238	710
ACCUMULATED DEFICIT, Table 12.5, Section 12	119,522	94,869	24,653
TOTAL	159,470	134,107	25,363

LIABILITIES**SPECIFIED PURPOSE ACCOUNTS**, Table 8.1, Section 8—

	1983	1982	Net increase or decrease (-)
Canada Pension Plan Account	24,108	21,547	2,561
Less: provincial government securities held by the Canada Pension Plan Investment Fund	22,764	20,368	2,396
	1,344	1,179	165
Superannuation accounts	30,672	27,528	3,144
Less: unamortized portion of actuarial deficiencies	1,846	2,185	339
	28,826	25,343	3,483
Unemployment Insurance Account	252	318	66
Less: interest bearing loans	3,390	35	3,355
	3,642	353	3,289
Government Annuities Account	1,150	1,172	22
Canadian Ownership Account			
Canadian Ownership special charge	1,676	786	890
Less: investments	1,609	711	898
	67	75	8
Deposit and trust accounts	1,758	1,981	223
Provincial tax collection agreements account	1,031	1,415	384
Other	436	378	58
TOTAL SPECIFIED PURPOSE ACCOUNTS	30,970	31,190	220

OTHER LIABILITIES, Table 9.1, Section 9

Interest and matured debt	8,398	6,721	1,677
Less: unamortized discount on Treasury bills	688	626	62
	7,710	6,095	1,615
Accounts payable	2,991	2,442	549
Outstanding cheques and warrants	2,530	2,322	208
Miscellaneous	114	112	2
TOTAL OTHER LIABILITIES	13,345	10,971	2,374

UNMATURED DEBT, Tables 11.1 and 11.9, Section 11—

Payable in Canadian currency—			
Marketable bonds	48,304	43,429	4,875
Canada savings bonds	32,641	24,978	7,663
Special non-marketable bonds	171	154	17
Treasury bills	29,125	19,375	9,750
	110,241	87,936	22,305
Less: Government's holdings of unmatured debt—			
Marketable bonds	(1)	110	110
Canada savings bonds held on account of employees	137	131	6
Special non-marketable bonds issued to the Canada Pension Plan Investment Fund	171	154	17
	308	395	87
	109,933	87,541	22,392
Payable in foreign currencies—			
Marketable bonds	3,409	3,295	114
Notes and loans payable in foreign currencies	1,825	1,122	703
	5,234	4,417	817
Less: Government's holdings of unmatured debt —			
Marketable bonds	12	12	(1)
	5,222	4,405	817
TOTAL UNMATURED DEBT	115,155	91,946	23,209

TOTAL

159,470	134,107	25,363
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The accompanying notes are an integral part of this statement.

Details of assets and liabilities can be found in Sections 7 to 12 of this volume.

(1) Less than \$500,000.

September 15, 1983.

MARSHALL A. COHEN,
Deputy Minister of Finance.PIERRE P. SICARD,
Deputy Receiver General for Canada.

GOVERNMENT OF CANADA

**Statement of Use of Appropriations
for the Year Ended March 31, 1983**
(in millions of dollars)

	Appropriations	Used in the current year	Balances		Carried forward	Used in the previous year
			Lapsed	Overexpended		
Agriculture—Budgetary	1,057	1,010	26		21	1,142
Non-budgetary	899	579			320	416
Communications—Budgetary	1,612	1,576	17		19	1,134
Non-budgetary	42	- 1	(1)		43	4
Consumer and Corporate Affairs—Budgetary	479	457 ⁽²⁾	22			790 ⁽²⁾
Non-budgetary	500				500	
Economic Development—Budgetary	23	18	5			13
Employment and Immigration—Budgetary	3,671	3,530	141			2,209
Non-budgetary	17	2			15	2
Energy, Mines and Resources—Budgetary	10,885	3,048	7,753		84	1,398
Non-budgetary	5,050	527	11		4,512	119
Environment—Budgetary	844	817	27			678
External Affairs—Budgetary	1,775	1,652	117		6	1,439
Non-budgetary	9,882	493	20		9,369	326
Finance—Budgetary	22,493	22,489	4			19,824
Non-budgetary	3,846	134	(1)		3,712	369
Fisheries and Oceans—Budgetary	510	483	27			441
Non-budgetary	30	6			24	7
Governor General—Budgetary	4	4	(1)			4
Indian Affairs and Northern Development—Budgetary	1,727	1,681	31		15	1,507
Non-budgetary	106	51	6		49	32
Industry, Trade and Commerce—Budgetary	1,286	1,207	81	2		812
Non-budgetary	912	- 135	4		1,043	- 111
Justice—Budgetary	227	217	10			200
Labour—Budgetary	89	82	7			71
Non-budgetary	(1)	(1)			(1)	1
National Defence—Budgetary	7,049	6,992	68	11		6,028
Non-budgetary	13				13	
National Health and Welfare—Budgetary	19,597	19,581	30	14		17,868
National Revenue—Budgetary	913	900	13			816
Parliament—Budgetary	175	167	8			151
Privy Council—Budgetary	78	72	6			64
Public Works—Budgetary	2,818	2,669	97		52	2,192
Non-budgetary	5,407	325	17		5,065	577
Regional Economic Expansion—Budgetary	784	545	239			661
Non-budgetary	27	2	(1)		25	4
Science and Technology—Budgetary	611	596	15			486
Secretary of State—Budgetary	2,233	2,214	13		6	2,214
Social Development—Budgetary	131	131	(1)			4
Non-budgetary	460	1			459	300
Solicitor General—Budgetary	1,366	1,319	47			1,184
Non-budgetary	(1)	(1)			(1)	(1)
Supply and Services—Budgetary	668	399	10		259	394
Non-budgetary	18	- 2			20	- 2
Transport—Budgetary	3,082	2,908	91	2	85	2,292
Non-budgetary	975	46	1		928	- 7
Treasury Board—Budgetary	511	229	282			318
Veterans Affairs—Budgetary	1,306	1,283	23			1,140
Non-budgetary	312	- 31			343	- 32
TOTAL BUDGETARY	88,004	78,276	9,210	29	547	67,474
TOTAL NON-BUDGETARY	28,496	1,997	59		26,440	2,005

The accompanying notes are an integral part of this statement.

Details of use of appropriations can be found in Volume II.

(1) Less than \$500,000.

(2) Includes the net expenditure for the Canada Post Corporation.

Amounts in roman type are budgetary.

Amounts in **bold face** type are non-budgetary loans, investments and advances.

September 15, 1983.

MARSHALL A. COHEN,
Deputy Minister of Finance.

PIERRE P. SICARD,
Deputy Receiver General for Canada.

Notes to the Financial Statements of the Government of Canada

1. Significant Accounting Policies

The accounting policies of the Government of Canada are based on concepts embodied in the Constitution Acts (formerly the British North America Acts), and in the Financial Administration Act and other legislation.

i. *Basic concepts*

The two basic concepts on which the Government's accounting system is based are found in the Constitution Acts (formerly the British North America Acts): first, the concept of the Consolidated Revenue Fund, which emanates from the requirement that all duties and revenues received, other than those reserved to the provinces, "shall form One Consolidated Revenue Fund"; second, the concept that the balance of the Fund, after certain prior charges, "shall be appropriated by the Parliament of Canada".

Parliament provides authority to make payments out of the Consolidated Revenue Fund in annual appropriation acts and other statutes (referred to as statutory appropriations). Spending authority granted in appropriation acts is for stated purposes and maximum amounts. Unless provided for in vote wording, unused spending authority granted in appropriation acts lapses at the end of the year for which granted. Spending authority provided by statutory appropriations is for specified purposes and for such amounts and such time as the acts prescribe. Spending authority provided by statutory appropriations generally does not lapse at the end of the year in which granted.

ii. *Government of Canada as an accounting entity*

For purposes of maintaining the accounts of Canada and preparing the Public Accounts as required by the Financial Administration Act, the Government of Canada is defined as all the departments named in Schedule A of the Act; any division or branch of the Public Service, including a commission appointed under the Inquiries Act, designated by the Governor in Council as a department for purposes of the Financial Administration Act; the staffs of the Senate, the House of Commons, and the Library of Parliament; and, any corporation named in Schedule B of the Financial Administration Act.

In accordance with the above definition, the corporations named in Schedules C and D of the Financial Administration Act are excluded from the Government of Canada as an accounting entity; therefore, their financial statements are not consolidated with those of the Government. The financial statements of these Crown corporations are presented in Volume III of the Public Accounts.

In addition, certain accounts and funds have financial statements which are not combined with those of the Government, but appear separately in Volumes I and II. These accounts and funds include the Exchange Fund Account, the Canada Pension Plan Account, the Unemployment Insurance Account and other similar accounts.

iii. *Classification of financial transactions*

The financial transactions of the Government as recorded in the accounts of Canada and reflected in the Public Accounts are classified into budgetary, non-budgetary, foreign exchange and unmatured debt transactions.

In general terms, budgetary transactions enter into the calculation of the annual deficit or surplus and are disclosed on the Government's Statement of Revenue and Expenditure. All other transactions lead to the acquisition or disposal of financial claims or to the creation or discharge of financial obligations, and are disclosed on a net basis on the Statement of Assets and Liabilities.

For purposes of accounting and reporting, the Public Accounts uses the classification in force at the end of the year to which the report refers, and presents figures for the previous year adjusted where necessary to provide consistency.

iv. *Budgetary revenue*

Budgetary revenue consists of all tax and non-tax receipts which affect the deficit or surplus of the Government, and includes revenue internal to the Government.

The Government generally reports revenue in the year in which it is received, with refunds of revenue allocated to the year in which they are actually paid.

Revenue is reported after deducting refunds paid, and excludes amounts receivable, taxes collected on behalf of provinces and territories, and amounts credited to the Canada Pension Plan, the Unemployment Insurance Account, the superannuation accounts, other specified purpose accounts and other liability accounts.

In the Statement of Revenue and Expenditure, revenue is reported both gross and net. The difference between the two is revenue credited to appropriations.

v. *Budgetary expenditure*

Budgetary expenditure consists of all charges to budgetary appropriations which affect the deficit or surplus of the Government. Such charges include those for work performed, goods received, services rendered, and transfer payments made, during the year, and, expenditure internal to the Government.

Expenditure excludes amounts charged to the Canada Pension Plan, the superannuation accounts, the Unemployment Insurance Account except for benefits to fishermen, other specified purpose accounts and other liability accounts.

In the Statement of Revenue and Expenditure, expenditure is reported both gross and net. The difference between the two is revenue credited to appropriations.

vi. *Assets*

Assets are defined as the financial claims acquired by the Government of Canada on outside organizations and individuals as a result of events and transactions prior to the accounting date.

However, as a result of the Government's accounting policies described above, and in accordance with the provisions of the Financial Administration Act and other legislation, certain financial claims are not reported on the Statement of Assets and Liabilities. The most important of these are accounts receivable for tax and non-tax revenue.

vii. *Liabilities*

Liabilities are defined as financial obligations to outside organizations and individuals as a result of events and transactions prior to the accounting date.

However, as a result of the Government's accounting policies described above, and in accordance with the provisions of the Financial Administration Act and other legislation, certain financial obligations are not reported on the Statement of Assets and Liabilities. These include amounts for: items to be paid from statutory authorities on which Parliament has not imposed annual ceilings; unused annual vacation and benefits payable upon termination of employment; and, actuarial liabilities arising from the indexing to the cost of living of superannuate pensions and annuities.

viii. *Fixed assets*

The fixed assets of the Government, which include land, buildings, works and equipment, are charged to budgetary expenditure at the time of acquisition or construction. Their existence, however, is acknowledged on the Statement of Assets and Liabilities by reporting them at the nominal value of \$1.

ix. *Accumulated deficit*

The accumulated deficit consists of the annual deficits and surpluses since Confederation, together with the write-off of certain amounts charged directly to this account.

x. *Valuation of assets and liabilities***ASSETS**

Assets are recorded at cost and are subject to annual valuation to reflect reductions from the recorded value to the estimated realizable value.

LIABILITIES

Liabilities are recorded in the amounts ultimately payable except for liabilities for the superannuation accounts of the Canadian Forces, the Public Service and the Royal Canadian Mounted Police, and the Government Annuities Account, which are valued on the actuarial basis.

The Canada Pension Plan Account and the Supplementary Retirement Benefits Account are not maintained on the actuarial basis. The Canada Pension Plan Act limits payments from the Consolidated Revenue Fund to the balance in the Canada Pension Plan Account.

xi. *Translation of foreign currency transactions*

Foreign currency transactions are translated and recorded in Canadian currency equivalents at the exchange rates prevailing at the transaction dates.

Assets and liabilities resulting from foreign currency transactions are, in turn, reported at year-end closing rates of exchange; net gains are credited to revenue, while net losses are charged to expenditure.

2. Change in Financial Statement Presentation

A new category, Energy taxes, has been included under Tax revenue—Excise taxes and duties in the Statement of Revenue and Expenditure. This new category presents amounts received by the Government under the authority of all acts and regulations pertaining to the administration of the energy program.

3. Contingent Liabilities of the Government of Canada

A contingent liability is a potential liability which may become an actual liability when one or more future events occur or fail to occur. The contingent liabilities of the Government consist of explicit guarantees by the Government, and potential losses arising from pending and threatened litigation relating to claims and assessments in respect of breach of contract, damages to persons and property, and like items.

The contingent liabilities of the Government as at March 31, 1983 amounted to \$6,894 million and are summarized in the following table:

	(in millions of dollars)	
	1983	1982
i) Explicit guarantees by the Government:		
Obligations of entities that are not agents—		
Borrowings by Crown corporations	170	178
Borrowings by other than Crown corporations	1,744	1,457
Insurance programs of the Government ..	535	332
Other explicit guarantees	2,129	1,789
ii) Pending and threatened litigation	2,316	2,136
	6,894	5,892

Details can be found in Section 12 of this volume.

4. Financial Information Regarding Agent Crown Corporations

All assets and liabilities of agent Crown corporations are assets and liabilities of the Government, because of the agency relationship. However, in accordance with the accounting policies of the Government, the accounts of agent Crown corporations are not consolidated with those of the Government, and only the financial transactions between the Government and agent Crown corporations, are recorded in the accounts of Canada.

Although borrowings by agent Crown corporations from lenders other than the Government are considered direct liabilities of the Government, such borrowings are not included in the accounts of Canada since they are intended to be, and in practice are, repaid directly by the corporations.

The following table summarizes financial information regarding agent Crown corporations as at March 31, 1983. For corporations with financial year ends other than March 31, unaudited financial information is included in this table.

	(in millions of dollars)	
	1983	1982
ASSETS		
Total assets excluding claims against the Government and Crown corporations	38,489	36,216
LIABILITIES		
Liabilities to other than Government		
Borrowings	8,737	7,252
Other	5,353	5,562
	14,090	12,814
NET ASSETS	24,399	23,402
EQUITY OF THE GOVERNMENT		
Obligations to the Government and Crown corporations	19,180	19,618
Less: claims against the Government and Crown corporations	996	1,314
	18,184	18,304
Share capital and contributed surplus	7,349	4,923
Accumulated deficit (-) / retained earnings	-1,134	175
TOTAL EQUITY	24,399	23,402
Contingent liabilities	768	384

Details can be found in Section 7 of this volume.

5. Insurance Programs

Certain agent Crown corporations operate insurance programs. In the event that such corporations did not have sufficient funds to meet their obligations, the Government would provide the required financing through appropriations, either budgetary or non-budgetary.

The following table summarizes information regarding such insurance programs. The information has not been audited since the corporations have financial year ends other than March 31, 1983.

Programs	(in millions of dollars)			
	Insurance in force	Net claims*	5 year average of net claims	Amount of fund or provision
Canada Deposit Insurance Corporation				
Current year	118,487	- 2	(2)	257
Previous year	108,937	- 15	1	230
Canada Mortgage and Housing Corporation				
Mortgage insurance fund ⁽¹⁾				
Current year	29,647	- 57	46	- 270
Previous year	27,254	24	82	- 216
Home improvement loan insurance fund				
Current year	4	(2)	(2)	7
Previous year	13	(2)	(2)	6
Rental guarantee fund				
Current year				27
Previous year				24
Export Development Corporation				
Export insurance contracts entered into on its own behalf				
Current year	1,824	2	4	15
Previous year	1,924	(2)	2	17

* Refers to the difference between claims and amounts received from sales of related assets and other recoveries.

⁽¹⁾ The Corporation's valuation of this fund as at March 31, 1983 disclosed an actuarial deficiency estimated at approximately \$270 million. This valuation is based on assumed future trends.

⁽²⁾ Less than \$500,000.

6. International Development Assistance—Loans and Subscriptions

i. Loans to developing countries

Included in loans to National governments of \$4,048 million (\$3,775 million in 1982) are loans to developing countries in the amount of \$2,698 million (\$2,431 million in 1982). These loans are part of Canada's international development assistance program and are either interest-free or bear interest at rates that were more favourable than those prevailing in Canada at the time the assistance was provided. The balances outstanding at March 31, grouped by term, are:

Term	Grace period before repayment commences	Interest rate	(in millions of dollars)	
			1983	1982
20 years	5 years	5%	35	35
25 years	5 years	6%	1	1
30 years	7 years	3%	178	178
30 years	7 years	*	9	8
35 years	5 years	*	4	4
40 years	10 years	*	1	1
50 years	10 years	*	2,470	2,204
			2,698	2,431

* Interest-free.

During the year, loan interest and commitment/service charges of \$4 million (\$5 million in 1982) was received from developing countries. Details can be found in Sections 7 and 14 of this volume and in Section 8 of Volume II.

ii. *Subscriptions and loans to international organizations*

Included in loans, investments and advances—International organizations of \$2,917 million (\$2,585 million in 1982) are subscriptions to the capital of the International Development Association and loans to other international financial institutions of \$2,453 million (\$2,175 million in 1982). These subscriptions and loans are also part of Canada's development assistance program. These institutions make loans to developing countries on terms similar to the loan assistance set out in sub-section i. Subscriptions to international organizations do not provide a return on investment. They are repayable on termination of the organization or on Canada's withdrawal therefrom. Details can be found in Sections 7 and 14 of this volume.

7. Transactions Internal to the Government

Total revenue and total expenditure include transactions which are internal to the Government. These amounts are as follows:

	(in millions of dollars)	
	1983	1982
Credited to appropriations	1,548	1,324
Credited to revenue	139	110
	1,687	1,434



OPINION OF THE AUDITOR GENERAL ON THE FINANCIAL STATEMENTS OF THE GOVERNMENT OF CANADA

I have examined the following financial statements of the Government of Canada for the year ended March 31, 1983:

- Statement of Transactions;
- Statement of Revenue and Expenditure;
- Statement of Assets and Liabilities; and
- Statement of Use of Appropriations.

My examination was made in accordance with generally accepted auditing standards and included such inquiries, tests and other procedures as I considered necessary to enable me to report as required by Section 6 of the Auditor General Act.

In my opinion, except as described in Reservation 1, these financial statements present information in accordance with the stated accounting policies of the Government of Canada as set out in Note 1 to the financial statements on a basis consistent with that of the preceding year. However, in my opinion, because of Reservations 2, 3 and 4, these stated accounting policies are inappropriate for a fair presentation of the assets and liabilities and revenues and expenditures of the Government of Canada.

Reservation 1: Failure To Comply With Stated Accounting Policy

During the year, \$674 million of oil export charges collected in the current and prior years (\$229 million and \$445 million respectively) have been paid to certain oil-producing provinces. Amounts collected have been excluded from revenue and payments made have been excluded from expenditure, in contravention of the accounting policies stated in Notes 1(iv) and (v) to the financial statements. These stated policies provide that revenue shall consist of all tax and non-tax receipts, and expenditure shall consist of all charges to budgetary appropriations, which affect the deficit or surplus of the Government. As a consequence, revenue for the year from oil export charges is understated by \$229 million (\$445 million in 1982) and expenditure of the Department of Energy, Mines and Resources for the year is understated by \$674 million. Although there is no effect on the accumulated deficit at year end, the deficit for the year is understated by \$445 million (1982 deficit overstated by \$445 million).

Reservation 2: Fragmented Reporting Of Government Activities

Although the financial statements are entitled "The Financial Statements of the Government of Canada", certain activities of government are excluded, as described in Note 1(ii). As a result, the financial statements do not provide a comprehensive and complete summary of the Government's assets, liabilities, revenues and expenditures. In my view, the accounting entity as defined in Note 1(ii) is inadequate in the following two respects.

- (i) Significant departmental activities are reported in separate financial statements or accounts that are not combined in the Government's financial statements. These separate financial statements or accounts are presented in the other sections of Public Accounts Volume I indicated below.

- Unemployment Insurance Account (Section 8)
- Canadian Ownership Account (Section 8)
- Exchange Fund Account (Section 10)
- Canada Pension Plan Account (Section 8)
- other similar Accounts (Section 8)

The reporting of transactions in the Unemployment Insurance Account (UIA) and the Canadian Ownership Account (COA) illustrates my concern.

For the UIA, accumulated benefits paid and administrative expenditures are reduced by accumulated revenues from employee and employer contributions and the Government's share of benefits paid; and the resulting amount is reported as a reduction of liabilities. In my view, transactions of the UIA should be consolidated in the Government's financial statements, with employee and employer contributions included in reported revenues, and benefits and administrative expenditures included in reported expenditures. If UIA transactions were reported in this manner, liabilities and accumulated deficit would be increased by \$3,642 million (\$353 million in 1982), revenues increased by \$5,039 million (\$4,887 million in 1982), and expenditures increased by \$8,328 million (\$4,902 million in 1982). The deficit for the year would be increased by \$3,289 million (\$15 million in 1982).

For the COA, accumulated levies of \$1,676 million received in respect of oil and gas charges, reduced by accumulated investments of \$1,609 million in Petro-Canada, is reported as a liability. If the investments were reported as assets and the levies reported as revenue, as in my view they should be, assets would be increased by \$1,609 million (\$711 million in 1982), liabilities reduced by \$67 million (\$75 million in 1982), and accumulated deficit reduced by \$1,676 million (\$786 million in 1982). The deficit for the year would be reduced by \$890 million (\$786 million in 1982).

The effect of UIA and COA transactions on the financial statements is significant and readily quantifiable and, in my view, can be resolved with little further study. However, in the case of accounting for activities reported in the Exchange Fund and Canada Pension Plan Accounts, while the effects are significant and quantifiable, further study by the Government is required to determine how and to what extent these activities should be included in the Government's financial statements to best satisfy the information needs of users.

- (ii) Investments in Crown-owned corporations and agencies at March 31, 1983 amounted to approximately \$25 billion, or 57 per cent of the Government's recorded assets. The assets, liabilities, revenues and expenditures reported in the separate financial statements of these entities are not consolidated in the accompanying financial statements. Further study by the Government is required to determine to what extent the activities of such corporations and agencies should be consolidated, and for those not consolidated, what alternative presentation would be appropriate. Until this fundamental question is resolved, I am unable to determine the effect of this matter on the Government's financial statements.

Reservation 3: Assets Reported At Amounts In Excess Of Their Value

When the international development assistance loans and subscriptions identified in Note 6 to the financial statements are issued, they are recorded as assets at the full amounts advanced in accordance with Notes 1(vi) and (x). At the date of issue, the amounts advanced by Canada considerably exceed the asset value received by Canada because of the concessionary terms described in Note 6. In my view, any excess of amounts advanced over asset value received confers a benefit and constitutes expenditure in respect of international development assistance, which should be recorded and reported as such on the Statement of Revenue and Expenditure. I have estimated that if the loans and subscriptions described above were reported in this manner, reported assets would be decreased and accumulated deficit increased by approximately \$4.4 billion (\$3.9 billion in 1982). The deficit for the year would be increased by approximately \$500 million (\$500 million in 1982).

Reservation 4: Unrecorded Liabilities

As stated in Note 1(vii), financial obligations are not recorded in respect of amounts payable under statutory authorities on which Parliament has not imposed annual ceilings, earned and unpaid annual vacation leave, employee termination benefits and actuarial liabilities arising from the indexing provisions of employee pension plans. In addition, no provision is recorded for obligations arising from losses suffered by Canadair Limited, The de Havilland Aircraft of Canada, Limited and other troubled companies whose debt is guaranteed by the Government. In my view, all these financial obligations should be appropriately recorded and reported in the financial statements to provide a more complete disclosure of liabilities. I have estimated that if these obligations were recorded, reported liabilities and accumulated deficit would be increased by at least \$16.5 billion (\$14.5 billion in 1982). The deficit for the year would be increased by at least \$2.0 billion (\$3.0 billion in 1982).

Additional information and comments on these reservations are included in my observations on the financial statements in Section 3 of this volume.

Ottawa, Canada
September 15, 1983

KENNETH M. DYE, F.C.A.
Auditor General of Canada

SECTION 3

1982-83

PUBLIC ACCOUNTS

Observations by the Auditor General on the Financial Statements of the Government of Canada

CONTENTS

Introduction

Reservation 1: Failure to comply with stated accounting policy

Reservation 2: Fragmented reporting of government activities

Reservation 3: Assets reported at amounts in excess of their
value

Reservation 4: Unrecorded liabilities

Reporting of summary financial information

Observations by the Auditor General on the Financial Statements of the Government of Canada

Introduction

I have examined the financial statements of the Government of Canada for the year ended March 31, 1983, which together with my opinion, are included in Section 2 of this volume. These financial statements are the Statement of Transactions, the Statement of Revenue and Expenditure, the Statement of Assets and Liabilities, and the Statement of Use of Appropriations.

My examination was made in accordance with generally accepted auditing standards and included such inquiries, tests and other procedures as I considered necessary to enable me to report as required by Section 6 of the Auditor General Act. This section provides that:

“The Auditor General shall examine the several financial statements required by section 55 of the Financial Administration Act to be included in the Public Accounts, and any other statement that the Minister of Finance may present for audit and shall express his opinion as to whether they present *fairly* information in accordance with stated accounting policies of the federal government and on a basis consistent with that of the preceding year together with any reservations he may have.” (italics added)

The word *fairly* is used to express the auditor's judgement as to the appropriateness of the selection and application of accounting principles to the particular circumstances of an enterprise. Because of the significant and pervasive effect on the financial statements of the matters reported in my reservations concerning the appropriateness of three of the Government's stated accounting policies, I have concluded that:

“... these stated accounting policies are inappropriate for a *fair* presentation of the assets and liabilities and revenues and expenditures of the Government of Canada.” (italics added)

My opinion includes four reservations. They address the same issues reported last year. The first reservation concerns a failure by the Government to comply with its own stated accounting policies. The second, third and fourth reservations concern the appropriateness of the Government's stated accounting policies. Because of its significant deficit in 1983, I have used the Unemployment Insurance Account to further illustrate my concern with the fragmented reporting of government activities. Also, I have included in my estimate of unrecorded liabilities a provision for obligations arising from losses suffered by Canadair Limited, The de Havilland Aircraft of Canada, Limited, and other troubled companies whose debt is guaranteed by the Government.

The observations that follow provide additional explanatory information on these four reservations, and comment on the reporting of summary financial information.

Reservation 1: Failure to Comply with Stated Accounting Policy

In my opinion on the financial statements, I call attention to a \$229 million understatement of oil export charge revenue (\$445 million in 1982) and a related understatement of \$674 million of expenditure of the Department of Energy, Mines and Resources.

I take exception to the accounting and reporting of oil export charge revenue and related expenditure because it results, in my view, in:

- an incomplete reporting of revenues received, which is contrary to the accounting policy requirement stated in Note 1(iv) that revenue shall consist of all tax and non-tax receipts which affect the deficit or surplus of the Government; and
- a method of accounting, contrary to the accounting policy stated in Note 1(v), whereby expenditures pursuant to a statutory appropriation granted by Parliament are effectively eliminated from reporting in the financial statements of the Government.

The oil export charge is a federal tax levied under federal legislation. There is no provision in this legislation to direct that any portion of amounts collected be held in trust for any other party, or be accounted for by Canada in any special way. Amounts collected are federal revenues.

From the inception of the oil export charge in 1975, and up to and including 1981, all amounts collected during a year were reported as tax revenues of that year in accordance with the accounting policy set out in Note 1(iv). However, commencing in 1982, a portion of amounts collected was excluded from tax revenues and shown as owing to certain oil-producing provinces. This was done to give effect to an undertaking by the Minister of Finance, in his October 1980 budget speech, to pay to certain oil-producing provinces 50 per cent of oil export charges collected in respect of oil exported from those provinces. This undertaking was subsequently confirmed by agreements between the Government and the provinces.

The required appropriation authority to pay over amounts to certain oil-producing provinces on a continuing basis was included in the Energy Administration Act (SC 1980-81-82, Chapter 114) assented to on July 7, 1982. Amounts excluded from revenue and shown as owing to these provinces were paid to them under this authority in the year ended March 31, 1983.

In the preface to the financial statements, the Government explains that the accounting policies it has adopted are designed primarily to provide an accounting of the financial resources appropriated by Parliament. The Energy Administration Act, under which payments are made to provinces in respect of oil exports, is an appropriation granted by Parliament. However, because of the accounting followed, payments to the provinces are excluded from reported expenditure and from reported use of appropriations. As a consequence, in my opinion, Parliament has not received the accounting for resources appropriated by it that the financial statements are designed to provide.

In summary, it is my view that all oil export charges collected should be accounted for and reported as general purpose tax revenues, and that payments to certain oil-producing provinces in respect of oil exports under the Energy Administration Act should be accounted for and reported as expenditures.

Reservation 2: Fragmented Reporting of Government Activities

Under the stated accounting policy described in Note 1(ii), significant assets, liabilities, revenues and expenditures of the Government of Canada are reported in separate financial statements of various accounts, funds and Crown-owned corporations that are not now combined with the financial statements of the Government. Therefore, although the financial statements contained in Section 2 of this volume are entitled "The Financial Statements of the Government of Canada", they do not provide a comprehensive and complete summary of the Government's assets, liabilities, revenues and expenditures, and the reported annual deficit and financial requirements do not reflect the results of all government activities.

Transactions in respect of the following departmental activities are reported in financial statements or accounts that are not combined with the financial statements of the Government:

- Unemployment Insurance Account;
- Canadian Ownership Account;
- Exchange Fund Account;
- Canada Pension Plan Account; and
- other similar Accounts.

Transactions should be recorded and reported in accordance with their economic substance to achieve meaningful summary level financial reporting for the Government of Canada. If for example a receipt is, in substance, federal revenue, it should be reported as such in the Government's financial statements, regardless of how it is reported elsewhere for other

purposes. The reporting of transactions in the Unemployment Insurance and Canadian Ownership Accounts illustrates my concern.

Under the Government's accounting policies, unemployment insurance contributions received, benefits paid and administrative expenditures are recorded in the Unemployment Insurance Account (UIA) and, except for a portion of benefits paid, are excluded from the Government's reported revenues and expenditures. The excess of accumulated benefits paid and administrative expenditures over accumulated revenues from employee and employer contributions and the Government's share of benefits paid is reported as a reduction of liabilities. In my view, unemployment insurance contributions levied on employees and employers are, in substance, federal revenues which should be included in reported revenues of the Government. Similarly, I believe that the full amount of unemployment insurance benefits paid and administrative expenditures are, in substance, expenditures of the Government which should be reported as such. If unemployment insurance transactions were reported in this way, liabilities and accumulated deficit would be increased by \$3,642 million (\$353 million in 1982), revenues increased by \$5,039 million (\$4,887 million in 1982), and expenditures increased by \$8,328 million (\$4,902 million in 1982). The deficit for the year would be increased by the UIA revenue shortfall of \$3,289 million (\$15 million in 1982).

It also seems clear that transactions now reported in the Canadian Ownership Account (COA) as a net liability constitute, in substance, revenues and assets which should be reported as such. In my view, levies received in respect of oil and gas charges and credited to the COA are federal revenues which should be included in Government revenues; and investments in Petro-Canada, charged to the COA as a reduction of the levies, are investments which should be included in Government assets. If these transactions were reported in this way, assets would be increased by \$1,609 million (\$711 million in 1982), liabilities reduced by \$67 million (\$75 million in 1982), and accumulated deficit reduced by \$1,676 million (\$786 million in 1982). The deficit for the year would be reduced by \$890 million (\$786 million in 1982).

Further study is required by the Government to determine how best to include transactions in the Exchange Fund, Canada Pension Plan and other similar Accounts in the financial statements of the Government. Recognizing that such a study has not yet been completed, and for purposes of illustration only, I have summarized below certain levies that are not currently reported as revenues on the Government's Statement of Revenue and Expenditure.

Illustration of unconsolidated levies	(in millions of dollars)	
	1983	1982
Unemployment Insurance contributions	5,039	4,887
Canadian Ownership oil & gas charges	890	786
Canada Pension Plan contributions	3,446	3,282
Portion of oil export charges	229	445
	<u>9,604</u>	<u>9,400</u>

The significance of these amounts in relation to the size of the Government, as reflected by its revenues, and the size of the Canadian economy, as reflected by Gross National Product, is shown by the following table. It compares total tax revenues now reported in the Government's financial statements with total tax revenues that would be reported if the above levies were included.

	1983		1982	
	\$ millions	% of GNP ⁽¹⁾	\$ millions	% of GNP ⁽¹⁾
Total tax revenues now reported on a gross basis	52,536	15.1	51,935	15.7
Total tax revenues on a gross basis if above levies included	62,140	17.8	61,335	18.5

⁽¹⁾ Gross National Product used in these calculations is for the calendar year ending within the fiscal year, as reported in Statistics Canada "National Income and Expenditure Accounts", fourth quarter 1982.

Because the effect is readily quantifiable and easily understood, I have used a possible effect on total reported tax revenues to illustrate my concern about certain departmental activities not being combined with the financial statements of the Government. The issue is, however, much broader and also affects reported non-tax revenues, expenditures, assets and liabilities. Further study by the Government is required to determine how and to what extent these departmental activities should be included in the Government's financial statements to best satisfy the information needs of users.

In addition to the departmental activities discussed above, government activities are also carried out by many Crown-owned corporations and agencies whose financial statements are not consolidated with the financial statements of the Government. At March 31, 1983, investments in such corporations and agencies amounted to approximately \$25 billion, or 57 per cent of the Government's recorded assets before allowance for valuation. The reporting of postal activities illustrates how use of the corporate form of organization can affect the Government's financial statements.

The activities of the Post Office Department were transferred to the Crown-owned Canada Post Corporation (CPC) on October 16, 1981. The financial statements of CPC are not consolidated with those of the Government because CPC is a Crown corporation named in Schedule C of the Financial Administration Act. As a consequence, beginning October 16, 1981, Canada's postal revenues and expenditures are to be reported only in the financial statements of CPC. Only the net contribution to the deficit of CPC is included in expenditure reported in the Government's financial statements subsequent to October 15, 1981. Significant revenues and expenditures have been excluded from the Government's statements simply by varying the legal form of the entity carrying out Canada's postal activities. Such changes in reporting make it difficult to compare meaningfully the information reported in these financial statements, over a period of years. In 1981, the last full year for which postal operations were included in the Government's statements, reported revenues and expenditures of the Post Office amounted to \$1,109 million and \$1,597 million respectively.

In my view, the current definition of the Government of Canada accounting entity based on legal form is not satisfactory. The accounting entity should be defined in such a way that the economic substance of an activity determines how that activity should be reported in the financial statements. Only in this way will a comprehensive, consistent reporting of government activities from year to year be achieved. Further study by the Government is required to determine how and to what extent activities carried out by Crown-owned corporations and agencies, or otherwise reported in separate financial statements or accounts, should be consolidated and, for those activities not consolidated, what alternative presentation would be appropriate. This is discussed further in my observation "Reporting of Summary Financial Information".

Reservation 3: Assets Reported at Amounts in Excess of their Value

In accordance with the stated accounting policies set out in Notes 1(vi) and (x) to the financial statements, the full amounts of special assistance loans to developing countries and subscriptions to the special development funds of international financial institutions are recorded as assets. At the date of issue, the amounts advanced by Canada considerably exceed the asset value received by Canada because of the concessionary terms described in Note 6. In my view, any excess of amounts advanced over asset value received confers a financial benefit on developing countries and constitutes expenditure in respect of international development assistance that should be recorded and reported as such on the Statement of Revenue and Expenditure. If this expenditure had been recorded in this way when the loans and subscriptions were originally issued, reported assets would be decreased and accumulated deficit increased by approximately \$4.4 billion (\$3.9 billion in 1982) and the deficit for the year would be increased by approximately \$500 million (\$500 million in 1982).

Canada provides assistance to developing countries by making grants and contributions and special assistance loans to them and by subscribing to special development funds of international financial institutions. Because of the concessionary terms described in Note 6 to

the financial statements, the loans and subscriptions, like grants and contributions, confer financial benefits on developing countries and are an important part of Canada's official program of assistance to developing countries. The grants and contributions, because they are not repayable or otherwise recoverable, are made under budgetary authority, recorded as expenditure and included in the deficit. Because the loans are repayable and the subscriptions considered to be eventually realizable, they are made under non-budgetary authority and recorded as assets.

The amount of special assistance loans included in loans to national governments at March 31, 1983 is \$2,698 million. Of these loans, \$2,470 million are repayable over 50 years without interest, with no payments for the first 10 years. At March 31, 1983, subscriptions to special development funds of international financial institutions amounted to \$2,453 million. These special development funds make loans to developing countries under terms similar to the special assistance loans made by Canada. The terms of these subscriptions provide that, on withdrawal from or termination of the special development funds, Canada will receive a pro-rata share of the funds' assets. Because of the nature of such assets, it would take many years for Canada to realize its share on termination or withdrawal.

Because the loans and subscriptions described above are made without interest or at less than economic rates, the Government is not fully compensated for the use of its funds over the period the loans and subscriptions are outstanding. As a result, when loans and subscriptions are issued, the value given is significantly greater than the value received. As stated in the Government's 1975 Report on the Study of the Accounts of Canada: "Ideally, the Government's Statement of Assets and Liabilities should come as close as possible to reflecting the true economic value of the assets and liabilities recorded on it."

Sometimes a "true economic value" for financial claims is not available, and an alternative approach is required. For example, when a loan is made to a Crown corporation by the Government, it is recorded as an asset at the amount advanced. To compensate for the use of its funds, the Government charges interest on the loan. In the absence of a market-determined interest rate, the Government calculates an arbitrary rate by reference to its cost of borrowing. Accordingly, with the addition of interest to compensate for use of funds, the amount advanced is equal to the asset value received.

When special assistance loans and subscriptions to special development funds are issued, they should be similarly recorded as assets only to the extent of their economic value at that date. Any excess of amounts advanced over asset value received should be recorded as expenditure. As with loans to Crown corporations, the selection of an appropriate interest rate for calculating asset value received is, to some extent, arbitrary. However, it would seem reasonable to determine a rate by reference to the Government's cost of borrowing in the same manner as rates are set for loans to Crown corporations.

If special assistance loans and subscriptions to special development funds had been recorded and reported as assets at their economic value when issued, the amount outstanding would have been approximately \$800 million as at March 31, 1983. In my opinion, this is the amount at which these loans and subscriptions should be recorded in the accounts of Canada at the year end. The difference of \$4,400 million between the amount at which they are currently recorded (\$5,200 million) and the amount at which they should be recorded (\$800 million) constitutes expenditure in respect of international development assistance that should have been reported as such on the Statement of Revenue and Expenditure and included in deficit in the year the loans and subscriptions were issued. This would have properly recognized the cost of benefits conferred by these loans and subscriptions in the year they were issued.

Reservation 4: Unrecorded Liabilities

The Government has defined liabilities as financial obligations to outside organizations and individuals as a result of events and transactions prior to the accounting date. However, under its stated accounting policies, certain financial obligations that fit this definition have not been recorded. These unrecorded liabilities include financial obligations at the year end related to items to be paid from statutory authorities on which Parliament has not imposed

annual ceilings, employee termination benefits, and actuarial liabilities arising from the indexing provisions of employee pension plans (including the Canadian Forces and the Royal Canadian Mounted Police). In addition, no provision has been recorded for obligations arising from losses suffered by Canadair Limited, The de Havilland Aircraft of Canada, Limited and other troubled companies whose debt is guaranteed by the Government. My Office has estimated that these unrecorded financial obligations amount to approximately \$16.5 billion (\$14.5 billion in 1982). There is a further financial obligation for earned and unpaid annual vacation leave that also fits the Government's definition of liabilities but is not recorded.

Following is a summary of those unrecorded liabilities which have been estimated:

	(in millions of dollars)	
	1983	1982
Items to be paid from statutory authorities on which Parliament has not imposed annual ceilings		
Subsidies under the Railway Act	100	250
Entitlements under the petroleum incentives program		350
Acquisition of Massey-Ferguson Limited shares		126
	100	726
Employee termination benefits.....	1,400	1,300
Actuarial liabilities arising from the indexing provisions of employee pension plans.....	13,500	12,500
Provision respecting Canadair, de Havilland and other troubled companies.....	1,500	
	16,500	14,526

The liability for subsidies under the Railway Act has been estimated by the Canadian Transport Commission. The liability for employee termination benefits and the actuarial liabilities arising from the indexing provisions of employee pension plans (including the Canadian Forces and the Royal Canadian Mounted Police) were estimated by the Department of Insurance, based on methods and assumptions used by the Department for purposes of current actuarial reports on the Government's superannuation accounts. For the reasons set forth in the following paragraph, I have estimated the provision respecting Canadair, de Havilland and other troubled companies at approximately the amount of government-guaranteed loans of these companies at March 31, 1983. Such loans are reported as contingent liabilities of the Government in Table 12.8 of Section 12 of this volume, and include:

	(in millions of dollars)
Canadair	1,163
de Havilland.....	266
Others.....	71
	1,500

In their most recent audited financial statements, which cover the year ended December 31, 1982, Canadair and de Havilland reported losses of \$1,415 million and \$265 million respectively. Additional losses of \$107 million and \$77 million were reported by these two companies in their unaudited financial statements for the six months ended June 30, 1983. The companies have already received \$700 million of Government assistance, \$400 million in the Government's year ended March 31, 1983 and \$300 million in the period April 1 to

September 15, 1983. In my judgement, the financial condition of Canadair and de Havilland has deteriorated to the point where they will require further assistance from the Government of Canada to service and repay their long-term debt.

Unrecorded liabilities for earned and unpaid annual vacation leave have not been estimated by my Office because the information required was not readily available. However, based on annual salary and wage costs, they are also likely to be substantial. The Government should estimate these unrecorded liabilities at the end of each fiscal year by referring to personnel and other records maintained by departments and agencies.

Based on the Government's definition of liabilities as financial obligations to outside organizations and individuals as a result of events and transactions prior to the accounting date, the exclusion from reported liabilities of the significant financial obligations described above results in an incomplete reporting of liabilities as defined. This directly affects the reported annual and accumulated deficit and the financial position at the year end. In my opinion, these financial obligations should be appropriately recorded in the accounts of Canada and reported in the financial statements to provide a more complete accounting and disclosure of liabilities.

Reporting of Summary Financial Information

As explained in my Opinion on the Government's financial statements in Section 2 of this volume and in the preceding three observations, I believe that the Government's stated accounting policies are inappropriate. Certain activities of government are excluded from the financial statements, certain assets that are included in the statements are overvalued, and certain liabilities are not included in the statements at all.

The Government, in the preface to the financial statements in Section 2, explains that the statements are "designed primarily to provide an accounting of the financial resources appropriated by Parliament" and "to report compliance with legislative authority". The question of purpose or objective of the Government's financial statements is not simply an academic matter of interest only to accountants. The current financial statements, designed to satisfy the objective of reporting compliance with authority, do not fully present significant information such as the Government's total revenues, expenditures, deficit, financial requirements and debt. My opinion shows, for example, that the annual and accumulated deficits would change by many billions of dollars if the Government accounted for its activities in accordance with their economic substance.

Media attention to the Government's reported deficit and financial requirements indicates a high degree of public interest in an economic interpretation of such summary information. In my opinion, readers would be best served by comprehensive, summary financial statements that report on government activities in accordance with their economic substance. Financial statements so prepared would also satisfy Parliament's intention as expressed in Section 55 of the Financial Administration Act that the Public Accounts include audited statements "of the expenditures and revenues of Canada for the fiscal year" and "of such of the assets and liabilities of Canada as in the opinion of the Minister are required to show the financial position of Canada as at the termination of the fiscal year".

In my observations last year, I called attention to the need for appropriate consultation among the interested and affected parties in order to achieve as soon as possible the common goal of providing financial information that best serves the needs of users.

Within the federal Government, the Office of the Comptroller General (OCG) is studying the purposes of summary financial reporting for the Government. The OCG expects to have a position paper on the objectives of summary financial statements ready by March 31, 1984.

Both the OCG and my Office have provided input and advice to the Public Sector Accounting and Auditing Committee (PSAAC) of the Canadian Institute of Chartered Accountants (CICA). In September 1983, PSAAC issued its first Accounting Statement, "Disclosure of Accounting Policies". This Statement contains Committee recommendations that are applicable to the federal and provincial governments. Currently, PSAAC is

developing an Exposure Draft on objectives of government financial statements. This Exposure Draft is expected to be released within the next year.

My Office will continue to support the important work being conducted by both the OCG and the CICA, and will report in subsequent years on progress. It will be equally important to take every opportunity to obtain the views of readers of the financial statements on these important matters. The development of well-founded, meaningful and consistent summary financial statements for the Government of Canada is a challenge to and responsibility of Members of Parliament and other users as well as those responsible for their preparation and audit.

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